

# HIGHLIGHTS

FROM THE 2024 HONOREES





## U.S. Department of Education Green Ribbon Schools Highlights From the 2024 Honorees

## Office of Communications and Outreach

**April 2024** 



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## **Abbreviations**

Full Term		
Americans with Disabilities Act		
advanced placement		
coronavirus disease 2019		
career and technical education		
U.S. Department of Education Green Ribbon Schools		
United States Environmental Protection Agency		
electric vehicle		
for all and a second se		
fiscal year		
greenhouse gas		
g		
high efficiency particulate air		
heating, ventilation, and air conditioning		
indoor air quality		
International Baccalaureate		
integrated pest management		
kindergarten		
light-emitting diode		
Leadership in Energy and Environmental Design		
mainima uma affician au man artina a valua a		
minimum efficiency reporting values		
prekindergarten		
promittorigation		
social emotional learning		
science, technology, engineering, the arts, and math		
science, technology, engineering, and math		
. 37, 3		
United States Department of Agriculture		





#### Introduction

Origins of the U.S. Department of Education Green Ribbon Schools program

In 2011, key leaders from the Campaign for Environmental Literacy, the Center for Green Schools at the U.S. Green Building Council, the National Wildlife Federation, and the Earth Day Network led some 80 national and state-based nonprofit organizations to request that the U.S. Department of Education (ED) honor schools for their sustainable facilities, health and wellness practices, and effective environmental and sustainability education. The award that evolved from this petition, U.S. Department of Education Green Ribbon Schools (ED-GRS),¹ has had a significant effect on the green schools movement and gave ED a platform to address school facilities, health, and the environment.

These leaders assisted ED in developing a consensus-based federal framework for a green school, featuring what came to be known as the Three Pillars of the award:

**Pillar One:** reducing environmental impacts, including waste, water, energy, greenhouse gases, and transportation, encompassing the areas of school facilities, grounds, and operations;

**Pillar Two:** improving health and wellness by promoting a healthy physical environment (including aspects such as air quality, contaminant control, moisture control, pest management, daylighting, and acoustical and thermal comfort) and student and staff wellness practices (such as healthy school food and outdoor physical activity); and **Pillar Three:** offering effective environmental and sustainability education, including civic learning, green careers, and STEM connections.

How the ED-Green Ribbon Schools recognition award functions

Annually, state education officials voluntarily participate by nominating their top schools, districts, and postsecondary institutions based on their demonstrated progress in ED's three pillars. Although ED provides some suggestions to state educational agencies to help them document nominees' work in the three pillars, ultimately, states have flexibility in their selection and nomination, so long as they document progress for each nominee in all of the pillars and elements. ED then uses the award to communicate honorees' promising practices and the helpful resources they successfully employ to the nation's schools.

Growth of ED's infrastructure and sustainability work

Over time, ED added several components to the initial school award, including recognition of school districts, early learning centers, and postsecondary institutions, as well as a state education authority official's award. Building on the success of the recognition award, ED developed ED Infrastructure and Sustainability, an initiative within the Office of Communications and Outreach, which has, over time, responded to the need for ED to develop expertise on environment, climate, and infrastructure as they relate to schools. In this way, the ED Infrastructure and Sustainability initiative has come to serve as ED's voice with federal agencies and other partners; advise senior ED officials and policymakers; and respond to stakeholder

<sup>&</sup>lt;sup>1</sup> ED's award is called "U.S. Department of Education Green Ribbon Schools" and includes "District Sustainability Award" and "Postsecondary Sustainability Award" categories. "Green Ribbon Schools" without the "U.S. Department of Education" is not ED's award, but instead is a separate program overseen by another organization.





and public requests on these subjects. It has also allowed ED to address emerging key issues for schools as they relate to infrastructure, including climate adaptation and resilience, and environmental justice.

ED's outreach has grown to offer more promotion for sustainable schools. ED hosts an annual Green Strides Tour spotlighting clusters of honorees. Through a partnership with the Center for Green Schools at the U.S. Green Building Council, ED maintains the <u>Green Strides School Sustainability Resource Hub</u>, a website that is available for schools to access free resources on healthy, safe, sustainable, 21st-century learning environments and environmental sustainability education. ED Infrastructure and Sustainability includes a <u>homepage</u>, a monthly newsletter, and social media (X and <u>Facebook</u>) to get the word out to schools about the three pillars, providing information about resources, programs, grants, and webinars, as well as other initiatives.

#### U.S. Department of Education Green Ribbon Schools by the numbers

With the 2024 cohort, some 584 schools (including early learning centers), 118 districts, and 65 postsecondary institutions have received an ED-GRS award (see Table 1). In this case, higher numbers do not necessarily indicate broader influence. ED-GRS was never created to *certify* thousands of schools but was rather intended as a recognition award. Each year, state education agencies are invited to nominate up to five early learning through 12th grade school or district candidates and one postsecondary institution.

These examples allow ED to highlight many innovative practices throughout the country. Candidates — whether school, district, or postsecondary — are eligible to receive this award only once, and award recipients must always state their designation with the year in which they were honored. Once ED has highlighted an institution's practices, it is beneficial in the following award cycles to highlight other, diverse examples. Schools nominated from districts that have already won the award should demonstrate achievements above and beyond those previously honored in the district application.

Table 1. Number of U.S. Department of Education Green Ribbon School honorees by year and type\*

Year	Schools	Districts*	Postsecondary*	Total
2012	78	N/A	N/A	78
2013	64	14	N/A	78
2014	48	9	N/A	57
2015	58	9	14	81
2016	47	15	11	73
2017	45	9	9	63
2018	45	6	6	57
2019	35	14	4	53
2020	39	11	5	55
2021	30	5	5	40
2022	27	5	4	36
2023	26	11	4	41
2024	42	10	3	55
Total	584	118	65	767

<sup>\*</sup>The District Sustainability Award was added in 2013 and the Postsecondary Award in 2015.





#### Number of ED-GRS participating states

Despite the exciting efforts that ED has highlighted with this recognition award, there is still work to be done to improve school facilities, health, and environmental engagement. On average, approximately 26 states voluntarily nominate candidates annually for this award (see Table 2). ED does not have a mechanism for highlighting the practices of green schools in the remaining states where state education agencies choose not to nominate.

Table 2. Number of nominating authorities for U.S. Department of Education Green Ribbon Schools by year\*

Year	Number of Participating Nominating Authorities
2012	30
2013	32
2014	30
2015	30
2016	27
2017	29
2018	26
2019	28
2020	27
2021	20
2022	19
2023	18
2024	24

<sup>\*</sup>All states, territories, the District of Columbia, the Department of Defense Education Activity, and the Bureau of Indian Education are invited to nominate.

#### Contributing to the development of a unified framework for a green school

A key contribution of the ED-GRS award is believed to be that, to some degree, it has brought various agencies and organizations together toward a common framework for a green school. Rather than one organization using the term "green school" to denote an energy-efficient school, another to refer to institutions offering environmental and sustainability learning, and a third to indicate environmental health or wellness practices, schools must encompass all three pillars in order to be considered green or sustainable. Many stakeholders nationally also use the term "whole-school sustainability" to encompass these efforts that are cross-operational and interdisciplinary. In this way, the three pillars are utilized as the basis for other school sustainability frameworks and programs. The <a href="Framework for a Sustainable School">Framework for a Sustainable School</a>, developed by the Department, provides an overview of the ED-GRS pillars and actions schools may take.

#### A spotlight for school facilities, health, and environment innovations

In 2011, the term "green school" was a relatively unknown concept across much of the country. Today, there is a growing understanding of what this work entails, in part because of ED's efforts annually to illustrate this work with the concrete practices of its honorees. ED's oversight of this award has offered the agency an opportunity to address and engage on such issues as school infrastructure and operational costs; environmental health and school wellness practices; nutritious, local, and student-grown school food; and hands-on, outdoor, environmental, climate, and sustainability learning, among other related topics. The award has also allowed ED to





highlight unique local, state, and national partnerships and projects where sustainability efforts intersect with equity.

A significant effect with a limited budget and innovative collaboration

Despite the historical limited availability of ED funds dedicated to school sustainability, the award has facilitated collaborations and connections, as well as highlighted resources. For example, both ED-GRS and Green Strides have enabled ED to share the many programs for schools offered by counterparts at the National Oceanic and Atmospheric Administration; Environmental Protection Agency; U.S. departments of Agriculture, Interior, and Energy; and collaborators across the for-profit and nonprofit private sectors.

In the same way that ED works more effectively across a broader range of federal agencies because of the award, some state education agencies are also collaborating in exciting ways with state health, environment, and energy agencies to select their nominees. The private sector, both for-profit and nonprofit, also has gotten involved at the federal, state, local, and school levels, working with schools and governments. Through this collaboration, ED's recognition award has become a tool to get various parties working better together for the benefit of students across the nation.

Green schools are successfully serving disadvantaged populations

Annually, 30% to 65% of ED-GRS school honorees have served majority-disadvantaged student populations, as measured by free and reduced price lunch, Title I (schools have high numbers or high percentages of children from low-income families), and minority populations in these institutions. While this is, in part, due to award criteria design, which asks states to ensure that at least one of their nominees is in a disadvantaged community, state nominations have substantially exceeded this minimum requirement. The high rate of honorees that serve majority-disadvantaged student populations demonstrates that, contrary to some misconceptions, "green school" status can be achieved by any school. In fact, it may be that school districts are concentrating their healthy, sustainable school facilities and learning work where it is most needed — in underserved communities. With ED-GRS-designated schools, districts, and postsecondary institutions providing better education to traditionally underserved students, it may be that green school practices are a tool to generally advance equal access to a quality education for all students.

A green school does not need to be newly constructed

To ensure that the award highlights diverse examples of sustainability, the competition assesses candidates based on resources available to them, rather than in comparison to each other. In fact, the award has, over the years, highlighted many older school constructions engaged in low-cost, but highly effective, retrofits and behavioral change. All of these are steps that any school community can undertake, without new construction, that is designed specifically to be resource efficient and environmentally healthy. In this way, the award has helped to educate the public about the broad applicability of green school practices in both old and new buildings.





Creating incentives for multiple pipelines for sustainability improvements by all schools

Another important consequence of the award has been the refinement of various national and state-specific green school programs that the award has spurred. States have realigned preexisting state green school programs, created new ones, and states now recognize runners-up beyond those they nominate to ED, in order to create pathways to the national award, broaden recognition within individual states, and provide incentives for more change.

#### The 2024 cohort

This year's selectees were confirmed from a pool of candidates voluntarily nominated and exhaustively reviewed by 24 state education authority implementation teams. While selection processes vary from state to state, members of several state agencies, as well as outside experts, often comprise selection committees. At the federal level, we have selected 41 schools, 10 districts, three postsecondary institutions, and one early learning center, for a total of 55 honorees, that demonstrate leadership to reduce environmental impact, improve health, and ensure that students learn through the most hands-on, engaging means possible (see Table 3).

Table 3. 2024 honorees by type

Type of honoree	Number in 2024
Schools	41
Nonpublic schools	8
Charter schools	1
Magnet schools	1
Districts	10
Institutions of higher education	3
Early learning centers	1
Disadvantaged-serving schools	27

Note: Honorees may fall into multiple categories of type of honoree. For example, an honoree can be both charter and disadvantaged-serving.

The diversity of U.S. Department of Education Green Ribbon Schools, District Sustainability Awardees, and Postsecondary Sustainability Awardees and the range of their work demonstrates that any school, district, or postsecondary institution can take steps to improve the sustainability, health, and climate-impact of school facilities; ensure nutrition and fitness practices for a lifetime of wellness and productivity; and engage students in real-world environmental learning. Notably, 27 of the 2024 honorees come from schools and districts that serve students from disadvantaged communities, representing 50% of honorees this award cycle.

Schools use sustainability in context to teach important civic values and skills that encourage students to grow into responsible, compassionate, and contributing citizens. Furthermore, working with dynamic environmental, social, and economic systems from an early age nurtures precisely the type of thinking, collaboration, and problem-solving skills that careers of the future require. This is the case whether these students graduate from green career and technical programs, college preparatory schools, community colleges, or liberal arts colleges.

It is with tremendous pleasure that we present the 2024 U.S. Department of Education Green Ribbon Schools, District Sustainability Awardees, and Postsecondary Sustainability Awardees.





These honorees are ensuring that their students learn to live, learn, and play with sustainability and health in mind — not as an afterthought, but as an integral part of everything they undertake.

The innovative practices of the 2024 Green Ribbon award winners are described in the remainder of this report. We also encourage you to visit <a href="www.ed.gov/green-ribbon-schools/awards">www.ed.gov/green-ribbon-schools/awards</a> to learn more about their innovative practices.





#### **Director's Award**

The Director's Award celebrates an individual's exemplary efforts to administer ED-GRS in their state. Specifically, the ED-GRS Director's Award recognizes a state education agency official who does the most to advance green schools. This year, ED is pleased to honor George Garcia, Education Program Consultant with California Department of Education, as the 2024 recipient of the U.S. Department of Education Green Ribbon Schools Director's Award.

Garcia's leadership and dedication have been integral to ED-GRS' success in California since 2019, where he has sustained a vigorous nomination process, including a multi-agency and sector review, and thoughtful personal attention to each applicant. He helps each school highlight their unique strengths, and identify impacts on their environment, students, and communities. Garcia has a passion for quality educational environments, as well as in-depth knowledge of environmental, STEM, and outdoor learning.

He effectively manages a three-tiered state award with bronze, silver, and gold levels to recognize California Green Ribbon Schools (CA-GRS) that have begun this work but are not yet ready for federal recognition. Notably, under Garcia's leadership, California has the most applicants of any state, with nearly 50 applicants in 2024. This is the result of his efforts sharing information with leaders, expanding opportunities for state recognition, and promoting the importance of whole-school sustainability and environmental literacy.

Recently, Garcia went even further to amplify the work of prior awardees by creating the Achievers and Applicants Network for CA-GRS, which unites past, present, and potential participants. The Network provides a cooperative learning environment for past recipients and future applicants of CA-GRS to network and share information.

Garcia works to build partnerships among state government and nonprofit organizations to develop and improve resources and funding opportunities, such as the new *Urban and Community Forestry Green Schoolyards* grant. His coordinated efforts with the nonprofit

organization <u>Ten Strands</u> have helped scale CA-GRS with a statewide working group, a resource website, and conference presentations.

Garcia goes above and beyond to make the advancement of sustainability in California schools a priority, including by overseeing a three-day, 400-mile Green Strides Tour across Northern and Central California in September 2023 that involved hundreds of participants, 10 schools, and five counties.

ED-GRS is grateful to have Garcia as a green schools leader in California and an example to state education authorities across the country working to create sustainable schools.



George Garcia, Education Program Consultant, California Department of Education





# 2024 U.S. Department of Education Green Ribbon Schools Awards

#### Alabama

#### Hoover High School; Hoover, Alabama

Hoover High School students in environmental and regular biology take advantage of the school's proximity to the Cahaba River as a source of investigation and study. Other subjects, such as history and geography, also cover the protection of natural resources. STEM and Bio Bucs teams engage in ongoing projects, such as maintaining and expanding the outdoor classroom, community cleanups, tree data collection, and bringing awareness to environmental issues. Hoover uses solar energy learning stations, renowned guest speakers, monarch way stations, drones, environmental sensors, sensory gardens, and mental health trails to meet the STEM. sustainability, and whole health needs of every student. Autodimming LED lights, student-led audits, and a building automation system upgrade help equipment run at peak efficiency and reduce energy consumption. A shared fruit tray reduces food waste in the cafeteria. Some local foods offered



At Hoover High School students work to protect the Cahaba River watershed and engage in citizen science in their Alabama Wildlife Federation-certified outdoor classroom.

include strawberries, watermelon, peaches, tomatoes, and lettuce. As part of the IB program, students collected 5,000 plastic bottles to make into a greenhouse for the outdoor classroom, which also features rain barrels, retention ponds, and 1.2 miles of the river. Science, math, art, language arts, and athletics use these many green spaces for training, recreation, and project and problem-based learning investigations. New Beginnings is a program featuring conversations and extracurricular activities, offered for students with social, emotional, or mental constraints that make it harder for them to adjust to a large school. Hoover also has two full-time nurses.

#### **Arkansas**

#### **Batesville School District; Batesville, Arkansas**

Batesville School District (BSD) is a rural school district, where more than half of students are eligible for free and reduced price lunch, that is actively engaged in addressing environmental challenges. Efforts to reduce environmental impact and costs involve water-saving measures, efficient lighting and windows, and solar panel installations. Water quality initiatives include runoff management, drought-tolerant landscaping, and leak reporting systems, while waste reduction measures encompass eco-friendly cleaning products and digital tools for minimizing paper waste. Alternative transportation strategies, such as reducing bus routes and promoting bus safety, aim to minimize the district's environmental footprint. The district demonstrates a comprehensive commitment to improving the health and wellness of students and staff through various health programs that address topics such as air quality, nutrition, mental health, and





access to health services. BSD secured a grant that enables the district to serve fresh fruits and vegetables daily and is piloting a Farm to School program that is focused on fostering a deeper connection between the school community and locally sourced, fresh food. The creative use of grounds for education and recreation, including greenhouses, trails, outdoor classrooms, and parks, showcases a holistic approach to education. BSD integrates these principles into its strategic plan, emphasizing hands-on experiences, community partnerships, and ongoing teacher training. Students experience environmental learning and STEM through activities such as water sampling, Junior Master Gardener's Club, Future Farmers of America, and maintaining a community garden. Students take field trips to pumpkin patches, zoos, the district solar field, nearby water treatment facilities and farms, a fish hatchery, and a week-long Dauphin Island Sea Camp to study marine life and ecology.



The tracking solar arrays in Batesville School District are 25% more efficient than fixed panels and excite the imagination of the next generation about the future of clean energy.

#### California

#### Trabuco Elementary School; Trabuco Canyon, California



Trabuco Elementary School students rotate their composter to prepare the contents for future application to their garden.

Trabuco Elementary School (Trabuco) is surrounded by O'Neill Regional Park, and educators take students into the park for educational activities, including hikes and nature walks. The school hosts on-campus field trips, allowing schools across Orange County to partake in the school's outdoor learning environments. Trabuco has three gardens — a vegetable and fruit garden, the Pollinator Garden, and the Mindfulness Garden — and a school farm with miniature donkeys, horses, pigs, goats, sheep, and other animals. Rigorous problem-based science instruction incorporating California's Environmental Principles and Concepts extends to farm and garden lessons, fostering hands-on learning. Trabuco operates recycling and composting programs, with students sorting leftover food for landscaping or supplementing the farm animals' snacks. Trabuco uses refillable condiment containers, provides utensils

as needed and without excessive packaging, and offers compostable trays. The Trabuco Coyote Green Team, consisting of kindergarten through sixth grade students, regularly meets to brainstorm ways to enhance campus eco-friendliness. Their initiatives have led to a 19% reduction in energy usage and a 7% decrease in water usage from the previous year. Solar garden lights were incorporated into the walkways of the on-site farm and the entryways to two school sheds, demonstrating their commitment to sustainable and energy-efficient lighting solutions. The school is planting more trees to reduce the heat island effect on campus, and campus plants are water-efficient and regionally appropriate. Trabuco students designed and implemented a rainwater capture system and a system for reusing drinking water. Trabuco prioritizes air quality by employing HEPA purification units in every classroom and indoor space, and strict policies on cleaning materials and practices.





#### Pacific Ridge School; Carlsbad, California



Ninth grade students at Pacific Ridge School hike in Yosemite National Park as part of an annual trip featuring a four-day back country hike, whitewater rafting, and leadership and navigation

Pacific Ridge School is an independent coeducational college preparatory school for students in grades 6-12. The hallmark of Pacific Ridge's commitment to green initiatives is environmental stewardship through service learning. Students participate in service-learning projects in collaboration with local sustainabilityfocused organizations from beach cleanups to wildlife conservation efforts. Their global travel program provides students with opportunities to learn about the economics. international sustainability strategies, and place-based environmental concepts. Pacific Ridge's Upper School Urban Agriculture Club manages an organic garden, sharing its produce with the community through on-campus farmers markets to raise funds supporting additional garden projects. The school reduces energy consumption using high-efficiency lighting and heating, ventilation, and air conditioning systems, and uses solar panels to generate 85% of the school's electricity. The school uses 100% reclaimed water and drip

systems for irrigation. Pacific Ridge encourages waste reduction with reusable items, compostable tableware, and a three-bin waste sorting system. Ventilation practices that started during the COVID-19 pandemic have become integral to upholding optimal indoor air quality in the long term, including HEPA filters and scheduled maintenance on all HVAC units. Also noteworthy is that Pacific Ridge has a chemical management program that strongly encourages purchasing environmentally preferable art and science supplies, furniture, and cleaning products. Department chairs review class supply orders and recommend safer alternatives when toxic products are proposed. In addition, Pacific Ridge requires custodial staff to use Green Seal cleaning products. Pacific Ridge's lunch program provides local organic food, and nutrition education is available through student health classes, flyers, and wellness programs. Furthermore, Pacific Ridge students and staff participate in various outdoor activities, such as Urban Agriculture and Surf and Skate Club, beyond those mandated by physical education requirements.

## Cabrillo Unified School District; Half Moon Bay, California

The Cabrillo Unified School District (Cabrillo) promotes environmental literacy and sustainability through strategic plans and districtwide initiatives. The Half Moon Bay High School Environmental Club inspired change in the district with a presentation to the school board about zero waste programs. The presentation inspired the school board to collaborate with the club to form the district's Environmental Sustainability Committee, involving students, staff, board members, and community partners in shaping the district's ecological efforts. Teaming up with the local county office of education, Cabrillo actively supports teachers and staff in designing project-based learning units emphasizing environmental action and justice. To enrich the educational experience, the district has



Students in Cabrillo Unified School District take part in equine education, agriculture career technical education, and Future Farmers of America, as well as cultivating school gardens and a farm.





established community partnerships and is committed to providing diverse outdoor learning opportunities for each student. Gardens are integral to the schools, including Cunha Middle School's Little Cunha Farm and the district's collaboration with the Health, Environmental, and Agricultural Literacy Project's Intensive Garden Program, which hosts a 26-week course for elementary students. Tri-bin recycling collection systems at each school enhance waste diversion, with students educated on proper sorting. High school students benefit from Agriculture Career Technical Education and Future Farmers of America programs, utilizing an on-campus outdoor classroom. Pilarcitos High School has a Farm to Table Cooking Program that provides students with hands-on culinary arts engagement. Participants prepare three-course meals to feed the students and staff using locally sourced ingredients. Physical activity is encouraged through a variety of programs, including after-hours hikes to connect students with the outdoors. Mental health is also encouraged through a wide variety of programs from kindergarten through 12th grade. Cabrillo's 11-year partnership with Safe Routes to School focuses on strategic infrastructure upgrades and events promoting alternative transportation.

#### Claremont Unified School District; Claremont, California

Claremont Unified School District (Claremont) has school board policies to guide the district's commitment to sustainability, environmental literacy, and school community wellness. In 2009, the district collaborated with a sustainability consulting company and also hired a district energy manager to monitor energy use. With these two initiatives, the district changed the behavior of staff and students and reduced energy consumption by over 19% in six years. Claremont schools feature programs that divert waste from landfills by recycling and composting. All Claremont schools have Green Teams or student leadership committees that lead the charge to employ effective environmental and sustainability education, gardens, and many feature outdoor learning environments. Schools focus on environmental learning, including studying the world's biomes, revitalizing green spaces, and honoring the local indigenous peoples' resourcefulness with natural resources. Claremont



On the first Wednesday of each month, students at Sycamore Elementary School in Claremont Unified School District celebrate walk and bike to school days.

High School offers Environmental Science and environmental community projects. Fifth grade students engage in a nine-week Leadership in Environmental Education Partnership project at neighboring Claremont College to learn from college students in outdoor labs and engage in real-time research. Claremont integrates a School Mental Health continuum throughout all schools in the district, including universal strategies to promote SEL and mindfulness groups, kindergarten social skills, mental health awareness, school-based character education, anti-bullying and internet safety programs, and parenting classes.

#### Rio School District; Oxnard, California

The Rio School District (Rio) serves over 5,000 students, 70% of whom qualify for free and reduced price lunch. Rio is located in an area with a climate conducive to year-round cultivation, inspiring educators to foster sustainable interactions with the environment. Since 2015, teachers have convened a group that conducts curriculum design sessions led by teachers and outside experts covering ethnobotany, native plants and their uses as remedies, and sustainability projects. Rio emphasizes a respectful relationship with the local environment, sustainability,





collaboration with the indigenous community, and STEAM integration through its newest school, Rio Del Sol STEAM Academy. The district's interdisciplinary approach emphasizes hands-on, experiential learning, integrating field trips and place-based learning to deepen students' understanding of local ecosystems and inspire sustainable practices. Since 2018, Rio has hosted "Compost Tea Parties" to enrich soil and promote natural garden management. In 2021, the district established the Rio Regenerative Farm to provide all Rio students with the essential

knowledge, skills, and abilities to build a healthy and resilient environment, food system, and community. Since 2013, the Rio Child Nutrition Services Department has implemented a Farm to School program; schools scratch-cook all meals and feature plant-based entrees on "Meatless Mondays." Rio staff works closely to ensure every facility and classroom is safe and conducive to learning and has implemented practices including maximizing natural light, creating shaded seating nooks, implementing an IPM program, utilizing greener custodial cleaning supplies, and installing HVAC systems with built-in HEPA air filters and ionizers. Rio conserves resources using automatic shut-off systems, timed irrigation, and waste reduction initiatives such as Zero-Waste awareness weeks and food share tables. Student advocacy prompted impactful changes in school cafeterias, from removing single-use straws to integrating local food through farm to school programs.



Sixth grade students in Rio School District release trout at Lake Casitas as part of their Trout in the Classroom participation.

### Department of Defense Education Activity

# Humphrey's Central Elementary School; Asia Pacific, Department of Defense Education Activity



Humphreys Central Elementary School features numerous raised garden beds with drip irrigation and rain barrels, that help to promote healthy nutrition and conservation.

Humphreys Central Elementary School (HCES) opened its doors in 2013 as a new Department of Defense Education Activity (DoDEA) school at U.S. Army Garrison Humphreys in South Korea. Through strategic measures such as installing timed sensor lights, sensor-flush toilets, low-flow water fixtures, and energy-efficient climate systems, the school has significantly reduced its environmental footprint. Initiatives such as a solar-powered LED lighting system along the front of the building, hazardous materials lockers, and a comprehensive composting program underscore HCES's commitment to sustainability. The school fosters a holistic approach to health education, with programs such as The Great Body Shop curriculum promoting well-being and home-school connections. Beyond the classroom, HCES prioritizes outdoor time and physical activity through extended recess periods and diverse Physical Education classes. The Monday Eagle News "Mindful

Mango" broadcasts encourage self-care, while the establishment of an Outdoor Makerspace provides hands-on learning opportunities. HCES's community garden serves as a hub for healthy eating and community engagement, with events such as the Fall Activity Expo promoting fitness and connection. HCES utilizes a drip irrigation system and a green-powered





electric car to educate students on sustainable practices. The school's commitment to sustainability extends to its curriculum, with a STEAM program emphasizing innovation and global collaboration. From monthly challenges using recycled materials to partnerships with national parks for conservation projects, HCES empowers students to lead in environmental stewardship. Through initiatives such as the DoDEA Sunflower Project and Earth Day celebrations, HCES instills a sense of environmental responsibility in its students. After-school events and community outreach further reinforce the school's dedication to sustainability and well-being.

#### **District of Columbia**

#### Marie Reed Elementary School; Washington, D.C.

Marie Reed Elementary School (Marie Reed) is a LEED Gold facility with sustainable features, such as bioretention areas, permeable pavers, a green roof, light and faucet motion sensors, and dual-flush toilets, that are used as teaching tools. Students participate in a unit on biking, which teaches them to navigate the city safely and culminates in a field trip. They also use city buses and the subway for field trip travel. The school has a bountiful garden with several outdoor classroom spaces and a fully functional teaching kitchen. Students benefit from nutrition education, outdoor and indoor gardening experiences, healthy after-school snacks, and an optional farm share for families. Marie Reed manages a school uniform community share program, schoolwide recycling, and cafeteria composting. Students learn about plant life cycles and observe a class worm bin to understand how food is broken down in the soil. They also



Students at Marie Reed Elementary School use their outdoor classroom, garden, and teaching kitchen for hands-on, outdoor learning about nutrition and gardening.

learn how to upcycle art materials to create original works. Students explore the nearby Anacostia River by boat and participate in a restoration program to protect American Shad. Fifth grade students work with partners to test air quality in the community and develop independent Environmental Action Projects. A dedicated Green Team leads environmental projects, ensuring meaningful environmental education experiences for students across all grade levels, including climate marches, hiking trips, walk-to-school events, and school grounds cleanups. Marie Reed seeks out community partnerships with many organizations, such as the Anacostia Watershed Society, National Parks, and local farms to provide students with a wealth of experiences to build on as they research and design their action projects. These opportunities inspire students to lead after-school and lunch bunch groups that focus on environmental issues.

#### St. Patrick's Episcopal Day School; Washington, D.C.

St. Patrick's Episcopal Day School (St. Patrick's) is a private elementary school serving students in nursery school through eighth grade. St. Patrick's strives to shape engaged citizens who live with integrity, empathy, and purpose through service opportunities, social justice causes, and stewardship of the planet. Beginning in 2018, students, faculty, and staff committed to maintaining a green campus, planting trees, conducting community events each week, creating





a sustainability task force, instituting a lunch composting program, and becoming the first school in D.C. to receive Eco-Schools USA certification from the National Wildlife Federation. The St. Patrick's STEM curriculum dedicated science classrooms and labs, a 3,750-square-foot garden and outdoor learning space consisting of nine raised garden beds, five large movable beds, two large outdoor classrooms, pollinator garden, wetland, and wooded areas. The outdoor garden classroom offers students hands-on opportunities to learn about where food originates, nurtures stewardship of plants and produce, and sparks conversations about how gardens can promote social justice and help remedy food insecurity in D.C. St. Patrick's SEEDS (Social, Emotional, Equity, Diversity, Spirituality) curriculum was developed to give the entire school community common language and themes on a variety of SEL topics. The school has installed heat pumps, an electric boiler, cooling towers, LED lighting, and motion sensors, resulting in a yearly energy cost reduction of 30%. St. Patrick's promotes environmental health practices through a



Nursery students at St. Patrick's Episcopal School enjoy learning in the 3,750-square-foot garden and outdoor learning space consisting of nine raised garden beds, five large movable beds, two large outdoor classrooms, a pollinator garden, and a wetland.

green cleaning program and supplies, residential duct A/C systems that address allergens, mold, volatile organic compounds and air pollutants, MERV 10-13 filters on all HVAC systems, and air turnover systems designed to improve student and staff health.

#### The Catholic University of America; Washington, D.C.



In 2022, The Catholic University of America broke ground on what is expected to become the D.C. area's largest urban solar array. The school has also offset 100% of its electricity usage through renewable energy credits since 2012.

The Catholic University of America is committed to improving the environmental well-being of the campus and the greater community. With 677 kilowatt of installed rooftop and parking lot solar capacity and the current construction of a 7.5 megawatt direct current ground-mounted solar array opening in 2024, Catholic University is a leader in renewable energy development in the D.C. region. Its extensive tree canopy and dozens of stormwater management devices promote a healthy ecosystem on campus, furthered by its commitments to native and adaptive plants, and the pollinator meadow that is planned to complement the new solar array. Employees can receive up to \$600 a year as part of a commuter incentive program focused on public transit, bicycling, and other forms of alternative transportation. The campus serves as a living lab for project- and place-based learning with various opportunities. Staff offer "sustainability tours" of the campus that are tailored to individual faculty members' courses from renewable energy

to water management. The university has four LEED-certified buildings and two buildings currently undergoing the certification process, and also offers a "LEED lab course" to provide university students with practical experience. Through the class, students completed a feasibility study to certify four buildings and established a campuswide LEED "Master Site." The community garden, established as a student initiative, partners to provide the on-campus food pantry with fresh produce. The Center for Teaching Excellence encourages discussions on how





to further integrate conversations about sustainability into the classroom. These efforts lead to a robust environmental and sustainability education with courses that can be found across two dozen majors, minors, and concentrations. Notably, Catholic University offers a Net Zero Design program housed within the School of Architecture and Planning to provide an opportunity for full immersion into the theory and application of sustainable design.

#### Florida

#### Dommerich Elementary School; Maitland, Florida

Dommerich Elementary School teaches behaviors that help promote a sustainable culture in students and the local community. The Garden/Eco Club offers lessons on waste reduction, habitat, and energy conservation efforts that lead to schoolwide projects. Throughout the year, classes visit the school garden and outdoor spaces, which feature a blend of annual fruits and vegetables and plants for local pollinator species. Students at all grade levels participate in interactive lessons such as bird habitat building, water usage tracking, solar oven construction, and Mangrove ecosystems, all designed to instill a passion for conservation. All classes have P.E. three times a week, where students run on Tuesdays and Thursdays, and participate in monthly "walk and roll" campaigns. In addition, Dommerich offers 5K runs, a heart challenge, random acts of kindness week, and youth mental health first aid classes for staff to promote healthy habits. The school uses energy-efficient equipment, LED lighting, classroom energy monitors, and low-flow water fixtures that



Outdoor learning areas at Dommerich Elementary School are used for more than just learning about where food comes from, what life needs, or the plant cycle. They are also used for health and wellbeing, such as this yoga in the garden.

integrate students' lessons into the classrooms. Material reuse and conservation efforts are evident across the school: classrooms have recycle bins, display "upcycled" decorations, students replenish reusable water bottles at filling stations, diners participate in composting their cafeteria food waste, and families can donate clothing and shoes at a station in the parking lot.

#### Sally Ride Elementary School; Orlando, Florida



Students' lives are enriched through community partnerships at Sally Ride Elementary School.

Sally Ride Elementary School students lead on efforts indoors and out, including energy conservation, waste management, and a living schoolyard. The school features energy-efficient light fixtures and low-flow water fixtures. Students monitor the use of energy and water through a weekly audit. Students engage in labs about green energy, constructing sundials and solar cars, ovens, and dehydrators. They create newsletters, signage, and monitor progress of their sustainability programs. They participate in summer camps with environmental education themes. Over the last year, the green schoolyards infrastructure doubled in size. The grounds feature rainwater barrels, birdhouses, a fountain, a sundial, a bug hotel, a butterfly farm, a giant chess board, hydroponics gardens, herb beds, vegetable beds, flower beds, and a student-designed and -installed irrigation system. In the cafeteria, students use both a share





table and the district's pilot food waste composting program. Sally Ride students learn about healthy nutrition from their garden and, every Friday, may take home healthy food donated by the Blessings in a Backpack program. Other activities include Green Career Day, a spring plant sale, walk and bike to school day, and Earth Day.

#### Zellwood Elementary School; Zellwood, Florida



Students at Zellwood Elementary School tend all campus gardens and make compost, learn about ecosystems, waste management, and where food originates.

Zellwood Elementary School (Zellwood) is a LEED-certified school that collaborates with other schools to advance sustainability initiatives. Zellwood's Environmental Committee meets at least monthly to plan sustainability-related activities. Teachers are encouraged to take professional training on the Everglades, bird counting, and waste management programs. The Zellwood PTA helps fund student-led initiatives, including a Trash to Treasure activity and pop tab collection incentives. Two campus beautification days, an Earth Day Expo, Literacy Night, and Family Fun Night incorporate environmental issues. Students educate each other and parents about hydroponic and soil gardening, the importance of energy and water reduction, and recycling. They also conduct energy and waste audits. The school grounds feature native plant and vegetable gardens, outdoor learning space, and fitness trails, with classrooms and several sustainability-themed clubs caring for the gardens. P.E.

classes include yoga and mindfulness, and the school celebrates walk and bike to school day. Students learn about invasive species, habitat loss, endangered species, water quality, and engage in citizen science documenting birds.

#### Northside Christian School; St. Petersburg, Florida

Northside Christian School focuses on water conservation, efficiency, and overall usage education, including through water bottle fillers, rain barrels, low-flow sinks and showers, and by planting native and drought tolerant plants that do not require irrigation. The school encourages

alternative transportation options such as bicycles, skateboards, scooters, carpools, and school buses. Unplugged is a club that aims to unite students through various non-tech activities such as board games, reading, debate, problem-solving, and art. The club raises funds for both its projects as well as nonprofit organizations for teen mental health. The cafeteria has been working for over 20 years to prevent food waste and provide fresh, healthy meals. The Blessings in a Backpack program supplements the diets of students who might otherwise go hungry on weekends. The prekindergarten playground, designed and built by the high school STEAM class, incorporates the natural world into everyday teaching. Students go on nature walks and learn about pollinating insects and the importance of maintaining a healthy environment. After-school clubs participate in beach and campus clean ups. STEM kits in classrooms help develop critical thinking and problem-solving skills. An outdoor lunchroom encourages natural resource appreciation. Field trips



The Northside Christian School new preschool playground was designed and built by the high school's STEAM class with the purpose of making it easier for teachers to incorporate the natural world into everyday teaching.





to the dump and dairy farms underscore lessons regarding waste management. Northside Christian School is actively involved in community improvement through various activities such as community groups, weekly chapel sermons, student-led clubs, and homecoming week activities.

#### Illinois

#### Clarendon Hills Middle School; Clarendon Hills, Illinois



Sixth-grade students at Clarendon Hills Middle School visit Fullersburg Woods to test and understand variations in soil and water. They also engage in invasive species removal.

Clarendon Hills Middle School's (CHMS) innovative practices inspire students and staff alike to be catalysts for positive change, not only within the school but also in the wider community and beyond. In partnership with CPower, the school has a Demand-Response contract in place, which involves a voluntary decrease in electrical consumption for short periods. CHMS has installed more efficient building automation systems and HVAC controls, powers the school with on-site solar panels and a wind turbine, and has teamed up with Community Solar to take advantage of new off-site solar farms. The electric wiring for car charging stations has been completed. The school features a workout center with showers. A full-time social worker is assigned to each grade level. CHMS offers an effective environmental and sustainability education program, with opportunities for outdoor learning and lab experiences, including visits to local forest preserves and parks. The Clarendon Living Classroom has bench seating for two classrooms, WIFI access,

native plants, and a space for community to gather. Students learn how to develop a model describing the cycling of matter and energy flow within an ecosystem's living and nonliving parts. They gather and analyze information to describe how synthetic materials come from natural resources and impact society. EcoClub and Science Fair Club participants engage in activities such as composting food scraps after lunch.

#### Lake Zurich Community Unit School District 95; Lake Zurich, Illinois

Lake Zurich Community Unit School District 95 (Lake Zurich) implements a multifaceted approach to sustainability, health, and environmental education. Energy conservation efforts such as LED lighting installation, motion sensors, EV charging stations, and HVAC system upgrades, coupled with the integration of renewable energy sources, including the installation of solar panels and geothermal fields at multiple sites, serve as authentic learning tools for students. A rigorous sustainability audit that reviews 36 months of utilities bills will help guide Lake Zurich in their future projects, along with plans to further expand the district's renewable energy portfolio. Lake Zurich has formed a districtwide sustainability committee that engages a diverse group of community stakeholders, and has integrated language about environmental responsibility as part of global citizenship in its district strategic plan. The district fosters collaboration between its culinary arts and healthy lunch



Lake Zurich Community Unit School District partners with Ancient Oaks Foundation for students to learn about native plants in the various living classrooms on school grounds.





programs, including by having the food service provider partner with young chefs for annual competitions and education. The district implements IPM protocols and ensures good indoor air quality through MERV 13 filters and ventilation system maintenance. Environmental education is embedded across the curriculum through outdoor learning areas, including butterfly gardens and native plant sites and partnerships with organizations such as the Ancient Oaks Foundation, offering hands-on experiences in environmental science and conservation. Waste reduction initiatives, including recycling and composting, reflect the district's commitment to sustainability and showcase proactive student leadership. Younger students embark on field trips to nature preserves, instilling an appreciation of nature. Meanwhile, older students, through extracurricular clubs, advanced classes, such as environmental science and Project Lead the Way Green Architecture, and a high school greenhouse and plant sale, collaborate with community partners on projects that promote outdoor education, environmental conservation, and business acumen.

#### Indiana

#### Plainfield Community Middle School; Plainfield, Indiana



At Plainfield Community Middle School compost bins are placed in teacher workrooms and the cafeteria prep area to help reduce food waste and supply nutrients for the school garden.

Plainfield Community Middle School (Plainfield) takes pride in fostering a community guided by core values, with a strong emphasis on environmental stewardship. Beginning in 2017, Plainfield embarked on a comprehensive initiative to modernize its 50-year-old facility, aligning it with rigorous energy-efficiency standards. Updated HVAC systems, water heaters, and smart lighting with automatic shut-off mechanisms significantly diminished the school's environmental footprint. Each week Plainfield recycles approximately 1,200 pounds of plastic, paper, and cardboard, and during holidays the school leads collection and recycling of holiday lights. Custodial staff use environmentally preferrable cleaning products. Plainfield's IDEALab STEM space empowers students to repurpose materials, and participants take an active role in promoting sustainability initiatives schoolwide. Furthermore, Plainfield's schoolwide compost collection reduces food waste. The school uses the finished compost to cultivate milkweed plants in

Monarch Waystations at the school and throughout the community. Science classes partner with the Indianapolis Zoo on projects to protect endangered or threatened animals in their natural habitats. Every class, from math to English, participates in "Green Week," with sustainability as the focus of the curriculum and students are empowered to make positive environmental changes and engage their community. Plainfield addresses mental health through many means, including on-site therapy sessions, the establishment of "peace centers" that provide a calm environment for stress reduction, and a therapy service dog.

#### Tri-North Middle School; Bloomington, Indiana

Tri-North Middle School (Tri-North) serves 554 seventh and eighth grade students, 45% of whom are eligible for free and reduced price lunch, representing the economically, linguistically, and culturally diverse northside of Bloomington. Since 2021, the school has occupied a newly constructed building designed to meet three primary goals: ensure the safety and health of





students and staff; provide an optimal environment for teaching and learning; and create an energy-efficient and environmentally responsible building and grounds. The building is heated and cooled through a geothermal heat pump and has LED lighting, "low-E" windows, and water-saving fixtures. In just over two years, the rooftop solar array has saved over \$80,000 by generating over 660 megawatt hours of power, equating to more than 350 tons of CO<sub>2</sub>. The grounds of the building were converted to a meadow to reduce erosion. Native plants and grasses were reintroduced in a no-mow and no-pesticide environment that became a welcoming habitat for the return of many different species. Other building initiatives include reducing cafeteria waste, recycling and composting, the installation of water bottle filling stations, and eliminating disposable tableware from the staffroom. The Backpack Buddies program sends groceries home to students in need. They are also offered health care products, as well as free dental care, eyeglasses, and mental health care. Whether



The Tri-North Middle School gymnasium is home to a rooftop solar array, which has, in two years of operation, saved over \$80,000, On the sunniest of days, Tri-North exports its energy surplus to the grid system.

creating collages of endangered animals in writing class; modeling innovative ways to deploy solar panels in science; using recycled or repurposed materials to make art; or studying the impact of social media on teens' health and safety in family and consumer science class, sustainability, wellness, and environmental education are an integral part of classroom activities across the curriculum.

#### Kentucky

#### Arlington Elementary; Lexington, Kentucky



In addition to composting organic material to keep it from going to the landfill, Arlington Elementary School students reuse materials to make artwork, like this plastic bottle cap mural.

Arlington Elementary (Arlington) is a Title I school serving 75% minority students where the school garden is used as a living laboratory for students to explore seeds, animal habitats, and the butterfly life cycle, and gain a hands-on environmental education. The garden is fertilized by one of the district's only schoolwide, student-run composting programs. Since the 2018-19 school year, Arlington has reduced overall energy consumption by 10%, primarily through occupant behavior as the school has not had any major capital improvements. Students conduct weekly energy and waste audits to help with efficiency and recycling. Mindfulness is integrated into the school culture, with daily SEL lessons, a mindful mentor program, and opportunities to develop mindfulness further using the "Zen Den." Teachers collaborate to integrate lessons on sustainability topics, such as water pollution, throughout the school curriculum. Arlington's full-time STEM teacher leads problem-based projects with students, such as having students

create a map showing how to stop erosion using planting and landscaping. In art classes, students have created community outreach materials to encourage the school to correctly recycle and reminders to turn off lights to save electricity. In technology club, students work on a semester-long project with the City of Lexington in which they create a model for a future





recreational park that is both accessible for people with disabilities and environmentally sustainable. Lastly, in Green Team, students learn to grow fruits, vegetables, and herbs from seed and then sell these to the school community and in a local wellness shop.

#### Robert D. Johnson Elementary School; Fort Thomas, Kentucky



Robert D. Johnson Elementary School students ensure they are sorting their recycling correctly by referring to student-created posters and fifth grade leads the composting charge that supplies garden amendments.

Robert D. Johnson Elementary (Johnson) is committed to providing project-based learning opportunities focused on environmental education for students at every grade level. Projects include motivating and educating the school population about recycling and composting in the cafeteria, using biomimicry to solve environmental problems, and creating structures that provide shade for animals. Students initiated and spearheaded the schoolwide recycling program that keeps 75% of its waste out of landfills. Built in 2021, Johnson was designed to be an energy-efficient facility with skylights and large windows to allow natural light throughout the building, motion sensors, automatic sinks and water efficient toilets, a healthy, energyefficient HVAC system and air filtration system, and efficient appliances in the cafeteria. The exterior of the school features two nature-themed playgrounds, native plant landscapes, a pumpkin patch, a garden, an environmental education center, a composting station, hiking trails, and a variety of fruit-producing native trees. The environmental education center was designed

over a three-year period by Johnson students in collaboration with a high school landscape architecture class, teachers, community mentors, and local architectural firms. This outdoor classroom is a certified Monarch Butterfly Waystation and contains native plants. For students of all ages, this space serves as a location to conduct experiments, make environmental observations, and meet the social-emotional needs of students through meditation and sensory breaks.

#### Louisiana

#### Eva Legard Center for Coastal and Environment Studies; Baton Rouge, Louisiana

Eva Legard Center for Coastal and Environment Studies (ELCCES) is a Title I middle school with a theme of environment and coastal science serving 100% free and reduced price lunch eligible and 95% minority students. The school won the 2023 Samsung Climate Superstars Challenge and has a city-designated "Eva Legard Day" each May 11, which honors the schoolwide instruction related to locally relevant climate change. ELCCES champions the use of STEM laboratories to engage students in initiatives such as composting, tending the garden, and cultivating and donating produce to the local food bank and nourishing class pets. Educators work with Louisiana State University's College of the Coast and Environment to create project-based learning activities and with the Louisiana Environmental Action Network to help develop environmental justice curriculum. Students know the issues facing the Gulf



At Eva Legard Center for Coastal and Environmental Studies students build and maintain their hydroponic growing apparatus and get outdoors to net fish.





Coast region because all seventh grade students receive instruction on water, air, and energy topics, and all sixth grade students take an agriculture class. All students are involved in a yearlong project that is aligned to standards in each subject area and revolves around issues that impact coastal Louisiana. The food education program focuses on growing food in hydroponic and traditional gardens and encourages students to try new foods. Weekly SEL lessons support staff and students' emotional and mental health. Plumbing and light fixtures have been updated with sensors to reduce water and energy consumption. Students engage in traditional and vermicomposting, water audits, repurposed materials art projects, and nearby park cleanups.

#### Park Forest Middle Creative Sciences & Arts Magnet; Baton Rouge, Louisiana



Park Forest Middle Creative Sciences & Arts Magnet students engage in hands-on garden learning, maintain an aquaponics lab, and practice yoga.

Park Forest Middle Creative Sciences & Arts Magnet (Park Forest) is a Title I school where 99% of students qualify for free and reduced price lunch and an equal percentage are minority. Park Forest's commitment to environmental and sustainability education goes beyond individual subjects, fostering interdisciplinary learning experiences that delve into the interconnectedness of environmental, energy, and human systems. The theme of renewable energy is woven across the curriculum and the school places a particular emphasis on exploring the connections between civic action and addressing environmental challenges. Students are exposed to different styles of gardening, from raised garden beds to aquaponics. Teachers have partnered with curriculum providers and community partners to bring project-based learning opportunities to the STEAM Lab, lessons and activities on topics such as how the coastal region of Louisiana is affected

by climate, water levels, and natural disasters, and energy-efficiency kits for students' homes. During the past seven school years, Park Forest has been able to reduce its overall energy consumption. Park Forest was renovated and now features energy and water saving equipment such as LED and motion sensor lights, motion sensor faucets, programmable thermostats, increased insulation, and water bottle filling stations. The outdoor learning classroom is the focal point of the exterior of the campus and features six raised beds for gardening, a newly installed irrigation system for efficient and effective watering, a composting station, and outdoor dining areas. Monthly club days serve as another opportunity for students to engage in outdoors and wellness activities, with clubs ranging from Green Club to 4-H, Yoga Club to the Tastefully Yours Club.

## Maryland

#### Lutherville Laboratory; Lutherville, Maryland

Lutherville Laboratory (Lutherville) opened in 1954 as the first new school in an integrated Baltimore County Public Schools system. An early emphasis on math, science, and communications provided a foundation for educating citizen scientists. The school offers interdisciplinary, project-based learning in every grade level to help students build an understanding of the environment and its intersection with human systems and to develop skills in STEM. Expanded learning programming develops STEM knowledge and addresses environmental sustainability. More than one-third of Lutherville students are members of the





Garden Club. In addition, the active Environmental Club has formed the Green Duck Patrol, which ensures the quality of the recycling program, as well as directing numerous other studentled environmental initiatives, such as vermicomposting, raising trout, and growing greens in a tower garden. Lutherville partners with two local nature centers for teacher professional learning and content-aligned field trips. The Trout in the Classroom program facilitates raising and releasing rainbow trout, and the Lutherville Garden Club provides mentorship to young gardeners. In the spring of 2023, each homeroom planted and adopted one of the 21 new trees on the Lutherville campus. The campus features a monarch meadow, an outdoor classroom, a 4,000-square-foot learning garden, and a storm drainage pond, each developed and nurtured with students and community partners. The school facility has undergone efficiency improvements, including building automation system upgrades, low leakage dampers installation, and enrollment in a demand



Lutherville Laboratory third graders release trout that they raised from eggs in the school aquarium while older students take part in kickseining to study organisms in the riverbed under microscopes.

response program, through an energy savings performance contract initiated in 2015, resulting in \$13,000 in energy cost avoidance. Within this contract, high-efficiency lighting and occupancy sensors were also installed. Lutherville composts food waste and has reduced daily trash by over 78%.

#### The Waldorf School of Baltimore; Baltimore, Maryland



The Waldorf School of Baltimore established a "classroom in the woods" that facilitates the Waldorf curriculum being carried out entirely in nature, in any weather.

The Waldorf School of Baltimore (WSB) nurtures children from preschool through eighth grade with a core education philosophy that emphasizes sustainability and environmental education. WSB provides a strong foundation in STEM according to the principles of Waldorf education, including hands-on exploration, nature-based learning, problem-solving in real contexts, an interdisciplinary approach, and project-based learning. Students are exposed to various weather conditions and build resilience as they learn to adapt to and appreciate the natural world, including through forest preschool, kindergarten, and aftercare programs. The campus features two rain gardens. three native fruit tree groves, seven raised vegetable garden beds, a pollinator garden, a dye garden, an herb garden, a sensory garden, a chicken coop, a certified wildlife habitat, a certified monarch butterfly waystation, and multiple outdoor gazebos and pavilions designed to facilitate outdoor instruction. WSB does not use any herbicides and has an annual woodland

audit led by an arborist to ensure the health of the grounds. WSB installed 440 energy-efficient LED lights, strategically positioned blinds to control daylight and temperature, and placed over 60 plants that enhance indoor air quality. Preschool and kindergarten students compost, diverting 350 pounds of organic waste from landfills annually. WSB offers a tuition discount for families who walk to and from school, advocates for carpooling, and has a no-idle zone policy. The school places a strong emphasis on student's holistic wellness and social and emotional health by providing guidelines on nutritious home-packed meals, engaging children in the





process of daily scratch-made snacks, having two recess periods, and conducting classroom talking circles. The Green Team collaborates with students, parents, and staff to implement best practices and hosts a repair of or upcycling of garments program monthly.

#### Massachusetts

#### **HEC Academy; Northampton, Massachusetts**

HEC Academy is a therapeutic, public, special education high school of 32 students, of which 69% are eligible for free and reduced priced lunch. Students participate in SEL classes four days per week with a curriculum that includes body positivity, anti-bullying, transition skills, and social skills building. They have access to yoga and meditation classes, standing desks, sensory tools, a "weightrium," and regular walks along an adjacent bike path. Staff have been able to work closely with students to transform their sustainability practices over the past three years. HEC is guided by a strategic plan that centers sustainability in all practices and requires the school to use only environmentally friendly cleaning and landscaping products. After a 2022 energy audit, HEC replaced all lights with LED ones, insulated pipes, and incorporated sustainability into the design for an upcoming building renovation. HEC Academy installed filtered water stations supplied with reusable cups, as well as water-saving faucets and hand dryers. In 2022, students



With help from Grow Food Northampton, HEC Academy students learn about food insecurity and how to cook nutrient-rich meals using local organic food from their school garden. They now receive all meals with reusable dishes and flatware.

designed and installed a school garden that is now at the heart of integrated environmental science and food education lessons, including weekly cooking classes. By redistributing uneaten food to local food justice projects and composting, HEC has reduced the school's food waste by over 90%. The school's environmental science and food education classes partner with a local food justice organization that provides them with organic produce throughout the year, and students gain hands-on knowledge of climate change through field trips to local farms. Students volunteer at several sustainability organizations, such as the annual Northampton Toy Exchange, where students help divert thousands of textiles, toys, and baby items from the waste stream to be redistributed to families in need.



Technical High School environmental science juniors engage in seine fishing at Dead Horse Beach in Salem.

# Minuteman Regional Vocational Technical High School; Lexington, Massachusetts

Minuteman Regional Vocational Technical High School (Minuteman) is a public regional career technical education high school that integrates academic and technical learning and challenges all students to reach their full potential and achieve success in the 21st-century global community. Minuteman offers 19 career technical majors, 14 sports teams, and 20 clubs and activities. Minuteman built a state-of-the-art LEED Silver certified building to replace an outdated 30+-year-old facility. The Horticulture and Environmental Science programs each have a greenhouse space with a 2,000-gallon water collection system for roof runoff. The greenhouse supports a sustainable food and farming curriculum by allowing students to be able to grow





produce and herbs year-round that supply the student cafeteria. Students tend five beehives and learn how to tap the maples on campus to collect sap for maple syrup production, reinforcing the value of the landscape as it relates to the economy and environmental health. The building was outfitted with a rooftop solar photovoltaic system. Minuteman makes every effort to ensure that career and technical education programs keep up with sustainability progress in each industry. Students are encouraged to take the skills learned in their shops out to the job sites where they get to work on real-life projects, including invasive species collection and eradication, building sustainable homes for underserved families in the community, and preparing meals for seniors using excess food from grocery stores that would otherwise be destined for the landfill.

#### Falmouth Public Schools; Falmouth, Massachusetts

Falmouth Public Schools (FPS) has 2,892 students enrolled, 40% of whom come from economically disadvantaged households, across seven schools. Beginning in kindergarten with Oceans Day, students develop their awareness of the impacts of erosion, pollutants, and climate change on coastal and ocean ecosystems. The hallmark of FPS' sustained efforts is a comprehensive reimagining of teaching and learning with a focus on conservation, sustainability, and environmental stewardship in partnership with scientists, researchers, and the greater professional community. Each school campus has dedicated sheltered outdoor learning spaces. Teachers and students turn various locations along 56 miles of coastline and 300+ acres of protected conservation into their living classrooms through walking field trips and professional development. Examples of FPS outdoor learning experiences include student



In Falmouth Public Schools, elementary students enjoy winter story time in a covered outdoor classroom.

participation in a more than two decades-long longitudinal study to observe and record data about local ponds. Students travel by boat to visit two nearby islands to learn their histories, the ongoing impacts on the island inhabitants, and to study how these places have changed over time. The Food Justice Initiative empowers students to engage with their community and make a sincere and lasting difference to increase equitable access to local, healthy foods. A district-owned outdoor adventure course enhances P.E. and personal growth. FPS has engaged in an energy audit and installed motion sensors, efficient windows, LED lights, and solar panels. FPS saves approximately 91,554 pounds of food scraps from the landfill annually and offers reusable flatware and trays in cafeterias. Schools participate in safe routes to schools, offer bike repair stations, and host bike rodeos.

## Michigan

### Hayes Elementary School; Westland, Michigan

When Hayes Elementary decided to go green, the school formed their very first Green Club with just five students. Today, the entire school, of which 46% of the student body is free and reduced price lunch eligible, is actively involved through a rotating Green Team Enrichment program. A letter-writing campaign persuaded the school district to discontinue the use of plastic straws and polystyrene in the school lunchroom, resulting in districtwide adoption of compostable lunch trays. A waste audit revealed that food was the primary waste, prompting the introduction of Waste Free Wednesdays and a share table. Students and their families help to





maintain the garden including creating labels for what is growing there. The Green Team ends the school year with a walking field trip to go strawberry picking. Inspired students organized Spirit Days to fund a plastic bottle bench for the park. The school has symbolically adopted both the honeybee and the Monarch butterfly through the World Wildlife Fund; they then distributed milkweed seeds to all students and installed a new pollinator garden supported by mentors from local community organizations for funding, planning, and maintenance. The addition of a STEM class titled Project Lead the Way prepares students for real-world challenges. Hayes has made the following facilities improvements through a community bond issue: replaced traditional lighting with LED lighting equipped with motion sensors, enhanced air quality with upgraded HVAC systems in classrooms, and replaced the school roof for better



Hayes Elementary School students measure the area where their pollinator garden will be constructed.

insulation. Hayes students maintain a healthy lifestyle through daily outdoor activities, utilizing the walking and running path, picking up trash, and planting trees. Events such as Scouts, Girls on the Run, Walk and Roll to School Day, and Eat a Rainbow Week also promote heart-healthy living.

#### West Side Christian School; Grand Rapids, Michigan



Students at West Side Christian School monitor water quality, participate in bird counts, engage in composting, and learn in a forest classroom.

West Side Christian School (WSCS) integrates hands-on, project-based, and problem-based learning into its curriculum including through a director of Outdoor Education position and professional development for place-based stewardship education. WSCS actively reduces its footprint through energy and water efficiency and quality measures, including LED lights, water-efficient toilets, filtered water bottle filling stations, and faucet aerators. Students take part in energy-related presentations, bring home "action kits," and conduct water quality testing at a nearby creek. The Creation Care/Green Team, led by student leaders and volunteers, spearheads initiatives including litter cleanups, paper and plastic recycling, TerraCycle and TREX programs for difficult to recycle items, and composting. In 2022, WSCS tackled excessive waste by eliminating approximately 17,500 Styrofoam trays from their waste stream annually. The school celebrates National Bike

Month and Bike to School Day to encourage students to ride to school and has established a no-idling zone to encompass parent pickup lines. A third-grade class at WSCS initiated the addition of a Monarch Butterfly Waystation to the school's campus, enhancing the landscape and creating an authentic learning opportunity for students across grade levels. In the spring 2021, seventh graders added a rain garden to the campus, creating a natural Michigan garden that serves as a native seed producer and a vital resource for pollinators. Students actively participate in planting, cultivating, and harvesting fruits and vegetables in the school garden that are then incorporated into the lunch program and a new greenhouse is in the works to extend the growing season. The campus also features an outdoor classroom, vernal pools, and a





swamp, facilitating intentional time outdoors and preparing students to be stewards of the planet, especially for the nature-based preschool and kindergarten classes.

#### Minnesota

#### Eden Prairie Schools; Eden Prairie, Minnesota



Eden Prairie Schools features several solar arrays and a district bakery, which prioritizes the use of healthy, local ingredients.

Eden Prairie Schools (Eden Prairie) serves nearly 9,000 students across nine school buildings. Over 50% of Eden Prairie students identify as people of color and 35% speak a language other than English at home. About 85% of energy used in Eden Prairie comes from solar arrays, which will allow the district to reinvest over \$6 million into student learning over the next 25 years. In 2024, a stormwater collection system will be installed to facilitate irrigation of the high school's green spaces. The district actively reduces solid waste, including electronic waste, and has a robust recycling program. By strategically planning school start times and scheduling, Eden Prairie was able to consolidate bus routes and reduce fuel use emissions by 15% each year. Nearly 27% of Eden Prairie Schools students walk, bike, or carpool to school. The district directly produces whole grain and healthy breakfast and lunch items on-site in a kitchen

and full-service bakery. Their Farm to School program supplies local milk and apples, and each school offers a fresh salad bar. Students begin to explore interests in sustainability and the environment as early as elementary school through interest-based Discovery Groups, with topics such as "We Explore Nature." Middle school level students can take GreENGINEERING, a course that explores how engineering and architectural designs shape the world around us. In high school, all students take an Earth and Space Science course, have access to career-area pathways that integrate research on sustainability topics and community advocacy, and also can take courses on outdoor activities. Eden Prairie's comprehensive school health and safety services promote student, staff, and faculty well-being, leading to positive, nurturing school climates.

#### Missouri

#### **Nerinx Hall; Webster Groves, Missouri**

Nerinx Hall is an independent, Catholic school serving girls in grades 9-12, founded in 1924 by the Sisters of Loretto. As part of the school's sustainability plan, Nerinx created a successful composting program, installed water bottle filling stations, significantly improved the school's ENERGY STAR rating, incorporated stormwater retention basins, and renovated the 4,900-square-foot courtyard to create a large green space with native plants. Nerinx Hall has diverted over 100,000 water bottles, 99,000 pounds of trash from the landfill, and reduced the number of weekly trash pickups by 40%. The school replaced a 1953 gas fired boiler with two new 80% efficient steam boilers and replaced lights with LED bulbs. Nerinx Hall uses an environmentally certified pest control company, runs air



Nerinx Hall students measure biodiversity through macroinvertebrate counts, replant trees, compost, and work at a local farm





purifiers with HEPA filters, and conducts quarterly cleaning and maintenance of the HVAC system. The Garden Club plans, plants, and cultivates a food garden on campus and shares their harvest with the community. Nerinx Hall hosts an annual flu vaccine clinic and the Bridge Program effectively addresses the needs of students through the provision of new and gently used goods, while simultaneously fostering dialogue, relationship building, and community support. The school promotes carpooling to and from school, field trips, and sporting events and established no idle zones on campus. Nerinx Hall offers various sustainability education courses including Eco-Act, where students research and implement a community engagement project related to local environmental issues; Eco-Spirituality, which explores the profound intersection of faith, ecology, and stewardship; and Natural Science of Missouri, which introduces students to local ecosystems, geology, and conservation.

#### New Mexico

#### Polk Middle School; Albuquerque, New Mexico



Polk Middle School students spend time in the garden/farm across grade levels and content areas and during electives for restorative practices.

Polk Middle School was built in 1968 and is a dual language school in English and Spanish that also serves as a champion for environmental and agricultural education for a student body that is 99% free and reduced price lunch eligible. It features a 30,000-square-foot school farm that provides food to families who experience food insecurity. The school farm encompasses 17 growing rows. 11 accessible raised beds, three hoop houses. and is used for cross-curricular learning projects. In partnership with the Ciudad Soil and Water Conservation District, Polk was awarded nearly \$600,000 from the EPA's Recycling Education and Outreach Grant Program, which Polk staff will use to design and implement pre-K to 12 composting programs and curricula over three years. The district energy team monitors energy usage and building performance, launched a water leak detection app, and works to increase solar production. Polk aims to create a drought-tolerant community orchard and outdoor

learning space. Community events are held at the school's *resolana* space that features a traditionally built adobe oven. A new STEM lab will include aquaponic and hydroponic systems in collaboration with state agencies. A half-time garden teacher works with educators from all departments to use outdoor learning to support all curricular areas. These include social studies units focused on environmental advocacy, math lessons in geometry and measurement, and science class Farm Fridays that allow students to apply the science that they learn in the classroom in the field. Students participate in walk and bike to school events and Polk is a pilot school for the district's interventions to encourage active transportation that lowers carbon emissions. In 2023 Polk was awarded \$12.8 million from the Magnet Schools Assistance Program, as part of the STEM Pathway called "Sustaining the Future." Over five years, Polk staff will receive comprehensive professional development on inquiry-based learning and teaching, environmental STEM content, integration, and cross-curricular connections, and engineering design and problem-solving through Project Lead The Way.

#### **Cuba Independent School District; Cuba, New Mexico**

Cuba Independent School District (CISD) serves a student population of rural and Indigenous communities and is deeply committed to fostering a sustainable and healthy environment for





students and staff while delivering effective social emotional, environmental, and sustainability education. Cuba has implemented in-house food growing operations, efficient lighting and HVAC systems, rainwater catchment in their agriculture program, and encourages teachers and students to walk or take public transportation to campus. CISD's districtwide compost system is a hands-on way for students to learn about the methods and benefits of composting. CISD has multiple outdoor classrooms and nature trails to connect students with the environment, promote ecological learning, and provide teachers with alternative environments for instruction. Cuba prioritizes the well-being of the community by implementing districtwide social emotional learning curriculum, enhancing student hydration by providing reusable water bottles and filtered refilling stations. and providing access to nutritious meals utilizing local and district-grown produce. The curriculum integrates environmental topics across subjects and connects to the local agrarian



Cuba Independent School District students tend to plants in the greenhouse and repair signs at a local trailhead as part of greenhouse and carpentry internships.

communities, traditional Navajo practices, and ensures that all students graduate with a deep appreciation for the environment and the knowledge and skills needed to address pressing environmental issues. The Animal Science classes discuss topics such as range management, ecosystem harmony, and sustainable and regenerative ranching/animal husbandry practices. Student interns work with the local U.S. Forest Service and soil and water conservation offices to learn about the importance of these agencies and the role they play in sustainability efforts.

#### New York

#### Garrison School; Garrison, New York



Garrison School students and community members paint the community mural for a PK to 12 Youth Climate Summit event.

Garrison School (GS) has made significant strides in environmental stewardship, focusing on reducing greenhouse gas emissions, student health and wellness, and the integration of environmental education across the curriculum. GS successfully transitioned from oil-powered boilers to fully electric air-forced heat pumps and is eliminating its gas-powered hot water heaters. The school tracks energy and water consumption by using ENERGY STAR Portfolio Manager. GS places a particular emphasis on student health and supporting students with asthma, providing training for staff members, and maintaining an on-site registered nurse for guidance. The school uses its expansive 181-acre forest for research and recreation and collaborates with the local gardening club to maintain the school gardens. Using green spaces, students explore self-expression and personal narratives and delve into composting,

climate change, indigenous perspectives, and biodiversity — all rooted in standards across disciplines. An annual pre-K to 12 Youth Climate Summit unites the entire community around sustainability. Environmental education is actively integrated into the curriculum across all grade levels. Teachers' professional development ensures effective environmental education integration, while collaboration fosters the creation of interdisciplinary ecological content. Students explore nature first-hand through citizen science projects. In history classes, students





learn how an ecosystem services mindset has influenced trade programs and how this historical perspective can help them take vital action. Mathematics supports students in conducting quantitative analysis of the human-wildlife relationship, examining population trends of endangered species. English language arts classes facilitate students communicating their findings and establishing a personal connection with the natural world. When students graduate from Garrison, they leave with a profound understanding of their impact on the natural world and the importance of civic action.

#### North Carolina

#### Salisbury Academy; Salisbury, North Carolina



The Salisbury Academy after school environmental club offers lessons led by the local college's internship program, providing environment and sustainability majors opportunities to make local, positive change.

Rooted in the principles of discovery and stewardship, Salisbury Academy (Salisbury) is committed to nurturing the next generation of environmental leaders. Central to the Salisbury approach is the integration of outdoor learning into the curriculum, fostering a deep connection with nature while instilling an understanding of renewable energy sources and their environmental impact. From the preschool program's emphasis on outdoor learning to comprehensive middle school science topics covering deforestation and agricultural runoff, Salisbury ensures environmental education permeates every level. Recent upgrades to Salisbury's facilities, including a transition to LED lighting and planting over 60 trees on the campus, underscore the school community's dedication to reducing its carbon footprint. Promoting sustainable transportation practices, Salisbury encourages carpooling, hosts an annual bike to school day, and employs a carpooling system for athletic events. Waste reduction is a priority at Salisbury, as evidenced by the switch from single-use plastics to

biodegradable alternatives in the cafeteria and the implementation of recycling programs for items such as markers and glue sticks. Reducing waste translates into the curriculum as well, with projects such as the eighth grade net-zero home design in which students build models from recycled materials. Students at Salisbury are environmental advocates in their community through actions that include the creation of infographics focused on local watershed conservation. The middle school Green Team presented at a community sustainability day and was awarded the Keep North Carolina Beautiful grant to enhance on-campus ecosystems aimed at supporting local wildlife. Collaborations with community colleges further enrich students' understanding of environmental science, reinforcing Salisbury's commitment to cultivating environmentally conscious citizens prepared to address the challenges of tomorrow.

#### Catawba College; Salisbury, North Carolina

Catawba College (Catawba) has made significant strides toward protecting the planet, from its 189-acre ecological preserve, with an extensive system of trails, ponds and waterfowl impoundments, to its Center for the Environment, and solar and geothermal energy projects. Catawba's unwavering commitment to sustainability and the environment is reflected in its achievement of full carbon neutrality in 2023, seven years ahead of its 2030 climate commitment. A Sustainability Advisory Committee consisting of students, faculty, staff, and trustees provides guidance, generates ideas, networks with partners outside the academic





community, and improves buy-in from all groups. The campus is home to solar shelters, a solar-powered trash compactor, solar water heating, passive solar facilities, rain barrels, a 5,000gallon cistern, a bike share program, and numerous LEEDcertified residence halls. The dining hall features trayless dining, a hydroponic farm shelf, a filter for converting used cooking oil into biodiesel, recycling, and composting. Sustainability and environmental stewardship are infused throughout the college's operations, culture, curriculum, and outreach, making it a livinglearning laboratory. Catawba students are using applied approaches to sustainability, including projects focused on waste reduction, energy efficiency in dormitories, increased biodiversity on campus, management of invasive species across the region, sustainable forestry, beekeeping, pollinator gardens, and other initiatives linked to professional skills and careers in environment and sustainability. Courses include Environmental Education and Communication, Sustainability Science and Environmental Policy, Sport and Sustainability, and



Catawba College installed a 20,000-gallon geothermal runoff recovery tank, which helps to irrigate nearly 30 acres of campus athletic fields. Water collected from the geothermal heating system is also used to refill the campus 210,000-gallon swimming pool.

Environmental Health and Toxicology, while faculty in all disciplines are encouraged to adopt sustainability across their curricula. An Environment and Sustainability degree prepares students to solve the socio-ecological challenges of their lifetimes. Catawba College provides opportunities for students to spend time outdoors through field labs, and supports student clubs that encourage hiking, camping, use of the campus low ropes challenge course, and service learning.

## Pennsylvania

### Rowan Elementary School; Cranberry Township, Pennsylvania



In the Rowan Elementary School garden, second grade students harvest radishes, providing opportunities for hands-on environmental learning.

Rowan Elementary School takes a holistic and immersive approach to education, environmental awareness, and sustainability. Formed four years ago, the school's Green Team has been proactive, organizing professional development opportunities in collaboration with the Green Building Alliance, securing grants for garden box supplies, and enhancing the aesthetics of the school through biophilic efforts. Environmental themes are incorporated into clubs, including the Robotics Club and STEM Club. Rowan Elementary provides enriching educational experiences that extend beyond traditional classrooms with project-based learning to encourage critical thinking in the context of environmental challenges. Hydroponics and gardening boxes serve as practical laboratories. The school utilizes outdoor spaces, such as the courtyard and amphitheater, as dynamic living laboratories for lessons on biodiversity and ecological balance. Educators at Rowan have championed a

composting initiative that serves as a powerful educational tool. The food scraps collected weekly are deposited in the compost bins by students and provide rich soil for garden boxes. In 2023, a first grade classroom studying pollution observed vehicles idling outside the school, brainstormed solutions, and created "no idling" posters. Students in grades 2-4 have assumed





the role of student ambassadors, imparting the significance of composting to their peers through informative videos featured during the morning announcements. Social emotional learning is embedded in daily routines, morning meetings, and LEAD (Learn, Explore, Act, Develop) lessons, fostering positive relationships. The school offers various mental health support services, including tiered interventions, mindfulness practices, and a sensory room. In addressing air quality, a comprehensive plan is in place, including the use of air purifiers in each classroom, fragrance-free policies, and continuous monitoring for mold. Sidewalks and bike routes are thoughtfully designed to enhance safety and encourage active, healthy lifestyles.

### Green Woods Charter School; Philadelphia, Pennsylvania

Green Woods Charter (Green Woods) is located on a former brownfield site with a large pond, stream, rain garden, and a dedicated wetland area as part of its stormwater management features. Every day, students are immersed in hands-on experiences such as recycling, composting, water quality testing, and the development of a local museum. Green Woods' commitment extends beyond the classroom by embracing renewable energy sources with on-campus solar panels, treeplanting initiatives, LED lights, and energy-efficient appliances. The school emphasizes eco-friendly materials, and proper ventilation to ensure a healthy indoor environment. Green Woods installed ultraviolet germicidal lamp technology on the campus rooftop HVAC units to reduce bacteria, mold, and pathogens. Additionally, Green Woods encourages students, staff, and parents to explore and embrace locally available, energy-efficient transportation options, has enhanced



Green Woods Charter School students participate in making their school more sustainable through recycling, tree planting, and STEM lessons.

alternative transportation infrastructure, and promotes walking and cycling to school. Students participate in the Air Quality Flag Program to assess and display daily air quality with colorful flags corresponding to the air quality index and students offer education campaigns on the subject of sugar intake. Green Woods has shifted its education model to align to the Science, Technology & Engineering, Environmental Literacy, and Sustainability (STEELS) Standards and has systematically infused science into other disciplines. The school focuses on hands-on learning, field studies in collaboration with a local arboretum and environmental center, and applying knowledge gained in the classroom to community-based service projects. In each grade, students tackle a variety of service projects, from recycling and composting to gardening and raising trout. These projects improve the school's local community habitat and increase student engagement.

### Reading Senior High School; Reading, Pennsylvania

Reading Senior High School (RHS), a school serving 96% minority and 86% economically disadvantaged students, has reduced its GHG emissions and increased its energy efficiency by replacing boilers, added new doors and windows with improved insulation, and updated its HVAC system to increase energy efficiency to 90%. To date, RHS has replaced 397 incandescent fixtures with LEDs in the hallways, gym, cafe, and exterior of the school. RHS has improved its water quality, efficiency, and conservation by testing annually for toxins, replacing older toilets with water efficient models, and installing water bottle refill stations. They reduce waste by collecting food scraps and hazardous materials such as light bulbs, batteries, and





metals. RHS teachers and students transformed an interior courtyard into an outdoor classroom with pollinator gardens, raised beds, compost bin, pond, and art murals. RHS offers health and wellness support to students and families by having certified school nurses, social workers, and guidance counselors on staff, and by partnering with outside organizations for substance abuse, mental health, and reproductive health services. Students learn about environmental issues and solutions through various subjects. such as English, history, biology and environmental science. RHS uses the outdoor classroom and the 19-acre campus' certified arboretum as learning spaces for students to explore nature and ecology. Students engage in STEM activities such as water quality testing, explorations of invasive species, "Trout in the Classroom" (where they raise and release trout in a nearby stream), and they manage the school greenhouse from



The courtyard is a hub for student outdoor recreation and art at Reading Senior High School, providing a welcoming space for all.

seed germination to plant sales. Students designed outdoor furniture, which was then built by CTE students for the courtyard, and participate in clubs, field trips, and internships related to sustainability.

### Puerto Rico

#### The TASIS School in Dorado; Dorado, Puerto Rico



The TASIS School in Dorado hosted a TED Talk devoted to environmentalism and green infrastructure. This event was instrumental in teaching young students about the importance of sustainability and caring for the environment.

The TASIS School in Dorado is a nonsectarian, coeducational, not-for-profit school from preschool to grade 12. TASIS Dorado's efforts to reduce environmental impact and costs involve a greenhouse gas reduction plan, featuring energy audits, enhanced insulation, and the optimization of HVAC systems. The integration of renewable energy sources, smart thermostats, and LED lighting further underscore the school's commitment to energy efficiency. The school's eco-friendly transportation policies include a car no-idling policy during drop-off and pickup periods and emphasize outdoor air quality improvement. Water efficiency and conservation measures, such as high-grade water filters and auto-stop water faucets, ensure the well-being of students while actively contributing to resource conservation. Ongoing student projects include partnering with a composting company on the island to repurpose food scraps from the cafeteria as compost. The Wellness Garden serves as a green space for various activities promoting mental and physical health, including community service opportunities and wellness

activities for teachers. Stringent health standards, regular COVID screenings, and a robust support system comprising full-time nurses, school counselors, and college counselors exemplify the school's commitment to holistic health. TASIS Dorado's comprehensive Integrated School Environmental Health Program reflects its commitment to maintaining a clean, safe, and environmentally conscious campus for the well-being of students and staff, fostering both a conducive learning and living environment. The school's diverse range of environmental courses provide an academic foundation for hands-on experiences through student-led





initiatives. Environmental projects, such as hydroponics, lionfish traps, and the creation of "bee hotels," showcase the mix of classroom learning with real-world problem-solving. Noteworthy community engagement initiatives include the active management of on-campus beehives, the installation of a STEM lab in a local public school, and collaborative efforts with nearby rural communities to promote lifestyle changes for sustainability. Notable courses include AP Environmental Science, Marine Biology, and Zoology, where students learn about ecosystems, marine life, and animal behavior. The integration of the United Nations Sustainable Development Goals into both the curriculum and the school FabLab projects demonstrates TASIS Dorado's commitment to global sustainability initiatives.

#### Rhode Island

#### **Dunn's Corners School; Westerly, Rhode Island**

Dunn's Corners School (DCS), a rural school of 274 students, is located just one mile from the Atlantic Ocean and a few miles from Wood River. Many of DCS's initiatives focus on waste management, such as recycling, composting, and a share-table for food recovery. Student engagement is a source of many of the school's environmental actions; for instance, a successful student-led petition resulted in the school swapping single-use polystyrene lunch trays for reusable ones. DCS changed its fluorescent lighting to LED and the school is served by one electric bus. The school's water filling stations reduce plastic bottles being used and encourage the hydration of school community members, while the cafeteria uses food sourced from local farms. DCS employs a full-time school nurse and social worker, and a half-time psychologist to bolster the well-being of students. Each classroom has a HEPA air purifier to



Max, the Recycling Superhero, joins an assembly at Dunn's Corner School to teach proper sorting and waste reduction.

minimize airborne particles; DCS has eliminated classroom carpets to reduce allergens; and the school cleans with washable microfiber cloths and reusable spray bottles. Sustainability is integrated throughout the school curriculum, including language arts, after-school enrichment programs, library resources, annual Earth Day celebrations, field trips to nature preserves, and classroom presentations with Rhode Island's Master Gardeners School Garden Mentor Program. DCS and the surrounding community encourage place-based environmental and water literacy. The school has embraced garden work to not only focus on growing various types of plants and using all organic methods, but also as a tool for learning. DCS's special education program uses the gardens for adaptive learning. DCS is also recognized as a Special Olympics Unified School, pairing students of different abilities.

### Frank D. Spaziano Elementary School; Providence, Rhode Island

Frank D. Spaziano Elementary School (Spaziano) is a pre-K-elementary school with an enrollment of 565 students, 73% qualifying for free and reduced price lunch, 79% minority, and 49% multilingual. The school building is all electric; has energy-efficient windows, insulation, and HVAC components; and is designed to reach net-zero once solar is installed for on-site energy generation. The school maximizes natural and electric light and has dimmable LED lighting controls with automated energy saving occupancy timers. Programmable HVAC controls allow regulated temperatures (heating and cooling) during occupancy, which saves energy. New plumbing and toilets have reduced water consumption by 31%. Spaziano engages students in





hands-on waste reduction projects and composted 1.8 tons of food in one school year, leading to an 80% reduction in food waste and yielding 1,400 pounds of compost. The school incorporates a farm to school approach to help students eat seasonally, develop lifelong healthy eating patterns, support the local economy, reduce food carbon footprints, and learn about origins of food. Spaziano uses cross-curricular integration to ensure that environmental themes are woven into various subjects, not confined to science alone. Green infrastructure on campus, including the gardens and green spaces, serve as a living laboratory for sustainable practices. The school supports environmental clubs, outdoor education, ecological research, and community engagement opportunities to expand environmental stewardship and knowledge. As students progress to upper elementary grades, they study more sophisticated concepts including age-appropriate environmental issues regarding pollution, conservation, and human impacts on natural systems.



The Frank D. Spaziano Elementary School's new construction emphasizes design with breakout spaces, daylighting, and healthy indoor environments conducive to learning.

#### Garden City Elementary School; Cranston, Rhode Island

Construction for the new Garden City Elementary School (Garden City) was completed in August 2023, with the entire design crafted to meet Northeast Collaborative for High Performance School Standards, prioritize energy conservation optimization, and serve as a step to improve efficiency and innovation districtwide. Several of the implemented strategies include high-efficiency building envelope insulation, high-performance building operations, utilization of a computerized maintenance management system, enhanced filtration, and implementation of low-emitting, locally sourced materials. The school implements activities that promote alternative transportation such as bike to school days and a collective walk on the annual Ruby Bridges Walk to School Day and has bike racks and a no-idling policy. Educators at Garden City maximize the use of outdoor spaces within and around the school to enrich the curriculum. Transforming designated areas into outdoor classrooms, teachers bring subjects such as science and literature to life, fostering a deeper connection with nature. The building offers unique, high-performing, flexible furnishings that allow students and staff to be able to



Garden City Elementary School's new building is an important step toward fulfilling the school's mission.

implement more agile learning practices that offer 21st-century learning means and methods. Garden City employs a range of innovative strategies to connect STEM thinking skills with real-world applications. Project-based learning is a cornerstone, with students engaging in hands-on initiatives that tackle sustainability challenges. These projects, ranging from designing eco-friendly solutions to conducting environmental impact assessments, encourage critical thinking and problem-solving within the context of sustainability. The school's Farm to School program, led by a committee with many invested stakeholders, incorporates this topic in the three "C"s of Cafeteria, Community, and Classroom.





### William D'Abate Elementary School; Providence, Rhode Island



Classrooms at William D'Abate Elementary School are designed with student needs in mind from collaborative spaces to furniture suited to students' learning styles.

The newly renovated William D'Abate Elementary School (D'Abate) serves students in grades pre-K through 5, 88% of whom are free and reduced price lunch eligible and 89% of whom are minority. In 2023, D'Abate began a major renovation project to the campus, originally built in 1960. This includes major renovation of the existing 40,000 square feet, as well as three additions: library/media center, pre-K wing, and an elevator tower for accessibility. This project is part of the district's Newer and Fewer initiative and represents one of its first facilities to be renovated to 21st-century learning environment standards. As part of the education enhancements, the building was renovated to provide collaborative learning spaces, breakout spaces, and state-of-the-art classroom environments. The school procures biodegradable paper, trains students as "Recycling Rangers," uses Green Seal certified cleaning products, and features LED lighting. D'Abate is the

recipient of the Learning Inside Out grant, a state-funded program, that will provide \$100,000 toward outdoor classroom development extending the classroom beyond the traditional four walls of the school. The grant projects include tree planting, rain gardens, and removing pavement, with all these activities geared toward providing hands-on learning opportunities while addressing the effects of climate change including stormwater management, reducing impervious surfaces, and reducing the heat island effect that disproportionately affects the urban areas of Providence. In addition, students are involved in project-based learning, outdoor science, as well as field trips to parks, wildlife preserves, and community gardens.

### Chariho Regional School District; Wood River Junction, Rhode Island

The Chariho Regional School District (Chariho) serves over 3,000 students in pre-K to 12th grade, across seven schools, with 11 buildings spread over five campuses. Chariho takes steps to reduce energy usage and costs such as replacing hot water heating generation equipment, using on-site solar power generation, utilizing an LED-based lighting system, weatherizing buildings, and installing new windows. Since 2022, nearly 80% of electricity has been produced by solar power (including purchased renewable energy). The district has installed MERV 13 air filters, water filling stations, and utilizes non-potable well water for irrigation to sports fields. Chariho takes a strategic approach to community partnerships that are focused on ensuring physical and mental health, positive school climate, and overall safety. Unified sports make athletics accessible and supportive for students with disabilities. Outdoor spaces include dedicated learning areas, shared gardens with native Rhode



Chariho Regional School District students explore alternative growing methods such as hydroponics and planting native species for ecosystem restoration.

Island plants, a nature trail, a greenhouse, bat boxes, areas devoted to group cooperative games and conflict resolution, and a storybook path. Through a recent grant, Chariho is adding





pollinator pathways at all schools and eight outdoor classrooms, including a frog and dragonfly pond. Chariho High School's students collect recycling from classrooms and educate fellow students about the process. Students use the greenhouse to explore alternative food production methods such as hydroponics and to produce native species plants that are used in an ongoing ecosystem restoration project. The Career and Technical Center offers an Electrical and Renewable Energy Pathway where students learn about residential building codes and design, and can design, build, and race an electric powered vehicle in a competition sponsored by the Rhode Island Computer Museum.

## Virginia

### Dale City Elementary School; Woodbridge, Virginia



Dale City Elementary School students enjoy an outdoor field trip at stations with environmental educators and soil samples.

Dale City Elementary School is a Title I school with 91% minority enrollment and 61% of students from economically disadvantaged households. Dale City actively integrates environmental literacy in all grades through the Virginia Standards of Learning and modeling the guidelines in the Prince William County Environmental Literacy Plan. Dale City has four formal outdoor classroom spaces used daily by the school community. Both indoors and out, Dale City's staff provides students with interdisciplinary environmental and sustainability learning, including hands-on and placed based, as well as citizen science activities. Dale City has dynamic and environmentally literate teachers and staff members who provide activities to support their students' learning about their place in the environment, striving for an outdoor activity for each grade level. Dale City students have learned about composting, solar

energy, dehydration, urban agriculture, and food justice. They conduct home health surveys, energy and water audits, and calculate carbon footprints. Guided by a student Green Team that meets weekly, Dale City built a one-mile nature trail around the school, maintains a Virginia native plant garden, added rain barrels to conserve water, and established a no-mow zone on the school grounds. All students receive free, nutritious meals and families are invited to walk together before school each Wednesday. Students benefit from a team of mental health professionals, behavior specialists, and student mentors. Since 2012, Dale City students and staff have embraced the Prince William County Schools Energy Management program and the school has seen a 22.6% avoidance in utility costs, representing \$280,000 over 11 years. A popular walk and roll to school program has surged to an 83% participation rate. The cafeteria provides reusable trays and utensils for meals and food scraps are composted. Furthermore, the school participates in the NexTrex, a program that helps to keep plastic film out of the environment and instead made into Trex decking and other products. In school year 2022-23, the school collected and turned in 63 pounds of plastic.

#### George P. Mullen Elementary School; Manassas, Virginia

George P. Mullen Elementary School (Mullen) is a Title I and International Baccalaureate school serving approximately 679 students annually, 56% of whom are economically disadvantaged. At Mullen, action is both an application of learning and an opportunity for students to engage in a form of service, promoting active citizenship, integrity, curiosity, and respect for the global community. The school is committed to reducing environmental impact by monitoring energy





and water use and by reusing and recycling, including through plastic film recycling, a food share table, and a district pilot composting program, which diverted 32,000 pounds of food waste over two years. Mullen students track the school's green building performance using a digital sustainability measurement platform. Teachers and staff practice turning on only 50% of the lighting in rooms, powering down computers and smart boards. and turning off lights upon leaving the building. A team of teachers and counselors provide ideas and advice for staff in dealing with social and emotional wellness. The teacher's lounge has been transformed into a relaxing mental health room with comfortable furniture and blankets, a soothing water fountain, and inspirational messages painted on the wall by the art teacher. Physical fitness and alternative transportation are encouraged, and 650 of the 679 students walk or cycle to school. Second grade students at Mullen take part in swimming

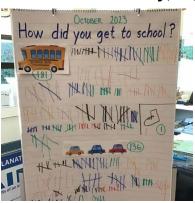


George P. Mullen Elementary School makes safe drinking water, water conservation, and reducing the use of plastic a priority with students.

lessons for six weeks and every Friday Mullen celebrates "Fitness Friday." Environmental literacy and sustainability are cross-curricular priorities at Mullen, featuring an outdoor classroom; bluebird birdhouse building; the development of a native plant garden; and studies on watersheds and soil, life cycles, and Virginia wildlife.

## Washington

### Artondale Elementary; Gig Harbor, Washington



Artondale Elementary School students research how their classmates travel to and from school each day as part of their exploration of transportation and air quality at the school.

Artondale Elementary School (Artondale) serves 411 students in a newly constructed building that meets green building standards. Since its opening, the school has made progress in reducing energy consumption on multiple levels, caring for the health and well-being of its students and staff, and educating students about the environment and the importance of becoming good stewards of planet Earth. The school was built with a focus on natural lighting and all lights are LED with motion sensors. The new HVAC system is energy efficient and runs by automated controls that reduce energy consumption. Off-site purchased power from hydroelectric dams is Artondale's primary energy source, and with on-site energy efficiency projects, overall consumption has been reduced. Landscaping of the grounds incorporates drought-tolerant plants and rain sensors. Artondale has also converted to all eco-friendly products and installed low-flow water faucets. Waste has been reduced,

especially in the cafeteria where a reusable flatware program conserves over \$1,800 annually. Fitness is at the forefront of students' daily routine and an important part of staff wellness. Students are outside more than the district mandates and are provided healthy lunches and snacks. Mental and social well-being are addressed through counseling, peer collaboration, experiential learning, and behavioral incentives. Students connect to real-world problems and learn about future career paths. Lessons are framed through the Next Generation Science Standards and feature an annual wind turbine contest event. A salmon habitat restoration project is one example of how students are taught stewardship. Each grade level focuses on a





different STEM area, learns about the environment, and incorporates problem-solving skills into real-world environmental issues, encouraging students to become advocates for greener practices.

### **Evergreen Elementary School; Lakebay, Washington**

As a rural school, where 64% of students qualify for free and reduced price lunch, Evergreen Elementary School (Evergreen) is aware of the limitations many of families may encounter in providing meaningful STEM experiences. At Evergreen, student leadership, voice, and choice in raising and releasing salmon, native plant restoration, weekend food backpack distribution, and other areas of civic responsibility create a school community where students not only feel they belong, but also know they are making a difference. Collaboration with organizations such as Pierce County Conservation District and Pacific Education Institute provide opportunities, including composting, habitat restoration, and place-based outdoor learning, that cultivate good stewards of the environment. The school's previous site is now referred to as the Outdoor Learning Environment and features raised garden beds and



At Evergreen Elementary School students observe the natural environment for signs of animal life, nesting, and preparing for the winter season.

rainwater collection for irrigation. The site is used for outdoor learning, exploration, food cultivation, and habitat study. Utilizing Project Wild lessons, students at every grade level focus on the impact of people on the natural environment. Evergreen implements many effective wellness practices, including a counselor and success coach who visits every classroom to teach on the character trait of the month, a weekly student yoga group, and a wellness coordinator who meets regularly with staff members on strategies for managing stress. Evergreen's facility was recently modernized with a HVAC system replacement, improved ventilation and lighting, and occupancy controls that significantly reduced the energy consumption of the facility and provide a healthy learning environment for the students and staff. Evergreen's rural location influences its resource management choices, including by landscaping with drought-tolerant and local plants, regularly monitoring water quality, and pursuing alternative energy buses.

#### Wisconsin

#### Creative Learning Preschool and Child Care Center; Madison, Wisconsin

Creative Learning Preschool and Child Care Center (CLP) believes environmental stewardship begins in childhood and is woven throughout the curriculum and practices. Project-based learning, community partnerships, parent outreach, clubs, and field trips nurture this learning for children ages 6 weeks to 5 years of age. CLP has reduced environmental impacts and lowered energy use by conducting an energy assessment and implementing prioritized recommendations, installing four rain barrels, offering TerraCycling to reduce waste, investigating composting options, promoting alternative transportation, seeking to support green energy and purchase solar power, and using outdoor spaces to create food and native gardens. For over 25 years, CLP has used a diaper service to provide cloth diapers for children ages infant through potty training age. The health and wellness of students and staff is supported by using commercial cleaning and natural cleaning products, increasing ventilation and air filtration,





chemical-free pest control, promoting sun safety, offering behavioral health services, and



At Creative Learning Preschool children learn about how corn is grown during a field trip to a local form

partnering with community organizations. The center has used its limited land space to install seven gardens, including sensory, herb, food, and native gardens, which supply both the school kitchen and community members. An on-site cook prepares high-quality, well-balanced meals for 150 students and staff three times a day, using produce from the garden and a local farmers market. Students have outside time in the two outdoor classrooms twice each day. In addition, the school's urban location facilitates regular outings to walkable parks, green spaces, and lakes. CLP uses an approach that centers active learning and lends itself to a curriculum that explores environmental and sustainability education. The school's curriculum includes standards in STEM and understanding the natural and physical world. Children explore science and nature concepts directly through a play-based curriculum and teachers use upcycled materials for open-ended projects.

#### Hawthorne Elementary School; Milwaukee, Wisconsin

Hawthorne Elementary School (Hawthorne) serves approximately 300 students in preschool through fifth grade, 93% of whom qualify as free and reduced price lunch eligible and 99% who represent minority populations. Through a grant with the Milwaukee Metropolitan Sewerage District, and the Green Schools Consortium of Milwaukee, Hawthorne had approximately 35,813 sq. ft. of asphalt removed and replaced with new green space and mixed-use recreation and educational areas, including an outdoor classroom, bioswales, a gaga ball pit, native plants that represent Wisconsin ecosystems, and a large underground cistern. Students and staff were involved in the planning and implementation of this schoolyard redevelopment project and the campus now manages approximately 84,353 gallons of stormwater per rain event. Hawthorne has reduced environmental impacts and costs by installing LED lighting in the building, using

computer power management settings, monitoring energy usage and costs, and removing appliances. Hawthorne continuously monitors lead, asbestos, mercury, and indoor air quality. Students and staff in the after-school Green Team Club participate in urban birding activities, learn about Wisconsin native plants and trees in the schoolyard, and how Hawthorne helps provide stormwater management to the community. Students learn about cultivating a vegetable garden, composting practices, and pollinator gardens. As a Green Schools Consortium of Milwaukee member, Hawthorne classes receive professional development, learning, and field trip opportunities. Green and healthy concepts are included in the curriculum at every grade level. Students participate in field trips with Nearby Nature and Discovery World, and hear from guest speakers who work for University of Wisconsin's Urban Ecology program.



Students at Hawthorne Elementary in Milwaukee, Wisconsin, explore the newly developed schoolyard, including the three bioswales.





### Milwaukee Parkside School for the Arts; Milwaukee, Wisconsin

Milwaukee Parkside School for the Arts (Parkside) is a K-8 elementary school with an enrollment of 836 students, 74% of whom qualify for free and reduced price lunch, 80% of whom are minority, and 26% of whom take part in special education. The Parkside community takes pride in its commitment to environmental, sustainability, and advocacy. All students are given the opportunity to learn in the aquaponics lab, hoop houses, and school gardens through an extensive gardening and agricultural program with an emphasis on conservation practices. Bimonthly culinary activities engage families and focus on nutrient-dense seasonal recipes from around the world. During the school day, students learn about where their food comes from and engage in taste-testing activities to try new, healthy, garden-grown, and locally sourced foods. Classrooms sign up year-round to work in the green spaces at the school, and lessons are arts-integrated, cross-curricular, and projectbased to educate the whole child. Students have led the schoolwide compost initiative for more than six years. As a



At Milwaukee Parkside School for the Arts, the courtyard showcases a rain garden and provides space for all classrooms to use for wellness breaks and environmental lessons, such as this flower pot painting activity.

neighborhood school, students are encouraged to walk and bike to school to reduce harmful emissions and the addition of bike racks and raised crosswalks makes it safer for families to do so. The school has undergone major renovations over the last five years that have included installation of energy-efficient windows, new ceiling panels, water bottle filling stations, and an efficient lighting system. Parkside promotes wellness through a sensory room, mindfulness committee, and culinary arts classes.

### Northland Pines School District; Eagle River, Wisconsin



Northland Pines School District students participate in the ribbon cutting for a new solar array.

Northland Pines School District is a small, rural district that actively demonstrates its commitment to environmental sustainability by installing solar power on all three campuses, converting lights to LED, providing water filling stations, and implementing temperature and lighting controls. The district has improved practices for indoor air quality, such as by using green cleaning products, installing energy recovery ventilation systems to bring in fresh air, employing MERV 13 filters, and implementing monthly inspections of school structures for mold, moisture, or water leakage. An active Farm to School program provides students with opportunities to learn about local resources, nutrition, and cooking. Students are immersed in environmental learning through a comprehensive outdoor physical education program that encourages exploration of the

natural world through hiking, cross-country skiing, snowshoeing, and biking. Students and staff spend a minimum of two hours, beyond recess and organized sports, learning outside daily. Early grades engage in lessons that include gardening, water and energy conservation, and waste minimization. Grades 3-6 delve deeper into topics such as environmental health and create conservation projects. They tap maple trees, boil sap to make syrup, and learn the science behind this sweet treat. The fifth grade curriculum emphasizes water conservation,





while sixth grade focuses on energy conservation and explores various power sources. At middle and high school levels, environmental topics are integrated into science classes such as Biology and Ecology & Environmental Impact, as well as extracurricular activities. Students and staff use many outdoor features as extensions of classroom learning, including a school pond, outdoor classrooms, pumpkin patches, vegetable gardens, chickens, hiking trails, fire pits, greenhouses, and a school forest.

### University of Wisconsin-Stout; Menomonie, Wisconsin



University of Wisconsin-Stout's sustainability wall in the Memorial Student Center educates the campus on the university's commitment to sustainability, including tips for a sustainable lifestyle and reducing GHG emissions.

Since becoming a charter signatory of the American College & University Presidents' Climate Commitment in 2007, University of Wisconsin-Stout (UW-Stout) has invested in sustainability research and education and worked diligently with students, staff, and the community to achieve campus carbon neutrality by 2050. The Sustainability Office and seven sustainability committees are composed of dedicated stakeholders who strategically plan to achieve UW-Stout's sustainability goals: make the campus more energy efficient, reduce landfill waste, incorporate green building principles into building renovations, enhance sustainable transportation options, and integrate sustainability into the curriculum across all disciplines. Overall, this has led the campus to a 33% reduction in emissions since FY09 (not including commuting). The university completed a \$1.5M LED lighting retrofit across 11 buildings and is home to solar arrays. UW-Stout maintains safe and comfortable campus facilities through exceptional air and water quality, thermal comfort, and environmental chemical management, and has a

campuswide tobacco ban. The campus garden provides fresh, local, and sustainably grown food to the campus, with students volunteering at the garden in exchange for free produce. UW-Stout recognizes that effective environmental and sustainability education requires a comprehensive approach within and outside the classroom. UW-Stout offers a variety of master's and bachelor's degree opportunities that incorporate sustainability across the curriculum including sustainable management, environmental science, packaging, plastics engineering, construction, industrial design, and interior design. There are also sustainability focused certificates and minors, including the sustainability and well-being certificate, design for sustainability certificate, and sustainability minor. The UW-Stout student government has funded numerous energy and waste reduction, transportation, food, and sustainability education projects and programs through the Green Fee and Alternative Transportation Fee. Students intern with the Sustainability Office and work with many sustainability committees to find and implement sustainability-based solutions across the campus and in the surrounding community, reducing the campus environmental impact.





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