



Now in its fourth year, the U.S. Department of Education Green Ribbon Schools (ED-GRS) continues to honor schools and districts. We have added a third category to this year's cycle: the Postsecondary Sustainability Award. So this year, for the first time, you can learn the full spectrum of sustainability work in schools, from early learning to postsecondary.

Here at ED, we work with natural resource and health agencies to share effective resources for school sustainability and, of course, spotlight the promising practices of our honorees. In the same way that we work together across federal agencies, state education authorities collaborate in exceptional ways with their state health, environment, and energy agencies. The private sector has gotten involved at federal, state, local, and school levels. In this way, ED's recognition award serves as a tool to get government working better to the benefit of students across the nation.

The ED-GRS Pillars of reduced environmental impact and costs, improved health and wellness, and effective environmental education remain the same, whether selectees are schools, districts, colleges, or universities. Increasingly, honorees' efforts are the result of more concerted policies at the intersection of environment, health, and learning at state, district, and university levels. We are pleased to see that the award has prompted instructors, parents, students, and administrators nationwide to acknowledge the critical need for students to learn in a manner – and a place -- that will sustain both them and the planet. These green schools, districts, and postsecondary institutions have taught us that it's not just *what* students are learning; the *where* matters too.

We've been thrilled with the collaborations at the federal, state, and local levels as a result of ED's recognition award. The collaborations that inspire us most, though, are those of our honorees themselves. Apart from progress in all three Pillars – not just one – you'll notice another common thread among our honorees: They have been tremendously resourceful in partnering with businesses, parks, farms, museums, nature centers, sporting facilities, religious institutions, townships, and countless other entities.

Our honorees are not necessarily the wealthiest institutions. In fact, over the last four years, nearly half of our honorees have educated underserved student populations. When it comes to green schools, high-poverty schools come out on top. That green school practices continue to be used as a tool to improve the built environments, health, and engagement of students of all ages that might seem to



have the slimmest chances for success, and that they are thriving as a result, is no longer a surprise to us.

This year's selectees were confirmed from a pool of candidates voluntarily nominated and exhaustively reviewed by 30 state education authority implementation teams. While selection processes vary from state to state, selection committees generally are comprised of members of several state agencies as well as outside experts. In the second step of selection, states' nominees to ED were reviewed by a team of several dozen federal reviewers. This year, we have selected 58 schools, 14 districts, and nine postsecondary institutions that demonstrate promising practices to cut costs, improve health, and ensure that students learn through the most hands-on, engaging means possible.

The U.S. Department of Education Green Ribbon Schools, District Sustainability Awardees, and Postsecondary Sustainability Awardees prove that any school, district, or postsecondary institution can take steps to improve the sustainability, health, and safety of school facilities; ensure nutrition and fitness practices for a lifetime of wellness and productivity; and engage students in authentic, real-world learning.

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 the careers of the future require, whether these students graduate from green career and technical programs, green college preparatory schools, community colleges, or liberal arts colleges.

It is with tremendous pleasure that we present the 2015 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, work, and play with sustainability and health in mind, not as an afterthought, but as an integral part of everything they undertake, from cradle to career.

The 2015 Green Ribbons are here. Prepare to be amazed! When you recover, go to our www.ed.gov/green-strides page and get started using some of the same tools these awardees employ.

Andrea Suarez Falken

Director, U.S. Department of Education Green Ribbon Schools

April 2015

California

Los Cerritos Elementary School, Long Beach, Calif.

After-school programs blossom from school garden roots

Los Cerritos Elementary School was established in 1924 in Long Beach, a city of approximately 465,000 residents, and one of the most diverse large cities in the United States. Located in an urban environment, the Long Beach Unified School District has been making strides toward sustainability, saving \$3,600,000 annually since 2002, and Los Cerritos Elementary has been doing its part in assisting with this effort. Established before the turn of the 20th century, many Los Cerritos buildings date from the early part of the 1900s. Since that time, Los Cerritos teachers, families, and students, 43 percent of whom qualify for free- and reduced-price lunch, have continued to build strong relationships within the community and work together for its betterment.

With a long history of community involvement and tradition, Los Cerritos Elementary is a fundamental part of the neighborhood, particularly with the Urban Farmyard, its well-known school garden. Established in 2000, the Urban Farmyard is a place of environmental stewardship and learning for every Los Cerritos student. The principles of the garden include encouraging healthy food choices by exposure to fruits and vegetables, which students grow themselves; encouraging character building and community involvement; and instilling in students a love of the Earth and a concern for the environment -- all while connecting lessons to state standards. The garden provides students with opportunities for authentic hands-on learning experiences, and is an ideal curriculum integrator.

The Urban Farmyard has received numerous awards and grants totaling over \$40,000 and has served as a model locally and nationally. The garden provides opportunities to introduce students to a wide variety of fresh foods by making use of 22 raised beds with drip irrigation to produce over 35 types of fruits, vegetables, and herbs. The beds attract beneficial insects and butterflies by creating borders made up of perennial flowers and herbs which also serve as a habitat for the wildlife. The garden allows students and community members to make healthy food choices, and engages them in beneficial physical activity. It is a designated Wildlife Habitat and a Monarch Butterfly Waystation.

Los Cerritos Elementary also boasts a seasonal flower garden with a Peace Pole and a solar-powered water feature. Along with a composting area, a chicken coop, a small fruit orchard, and a red tool barn, the school brings lessons alive by incorporating outdoor classroom seating and tables on its grounds. The outdoor



spaces are also used for buddy reading, observation, lessons, games, movie nights, sleepovers, graduation, and potluck dinners. Classes take walking field trips, such as to the Dominguez Gap Wetlands next door, and use California Education and the Environment Initiative environmental education standards. Los Cerritos worked with past ED-GRS honorees to learn from them.

Gardening acts as a gateway into career exploration of fields such as agriculture, forestry, ecology, soil science, horticulture, botany, cooking, pharmacology, and carpentry. It is a stage for discovery-based learning in all subjects, questioning, experimenting, and problem solving, all of which are important parts of the Common Core State Standards. Gardening engages children in relationships with learning, nature and the environment, community resources, and with their peers and adults. Experiences in this beautiful outdoor space also foster a sense of responsibility and respect for all living things, and provide a spirit of cooperation among those involved. This spirit transfers to the classroom and creates a strong sense of community and appreciation for others.

From involvement in programs such as Cool the Earth, a sustainability afterschool club; Roots & Shoots; a comprehensive recycling program; the school's active Green Team; and a PTA that continually inspires families, the Los Cerritos community walks the walk of environmental stewardship and sustainability. Reusable plates, silverware, and cups all are a part of the school's garden cooking lessons, PTA teacher luncheons and potlucks, and student lunches, especially on Trashless Tuesdays. The parent and student Green Team takes the lead in recycling lunchtime food waste and participates in Terracycle Brigades. The team organizes bottle and can drives, along with book and uniform swaps for students. For families, the team offers valet parking to promote safe drop-offs and reduce vehicle idling, the walking school bus, Walk-to-School Wednesdays and Bike-Friendly Fridays, and a page on the Los Cerritos website devoted to healthy lifestyle choices and tips.

The campus features permeable surfaces and achieved ENERGY STAR certification in 2011 with Portfolio Manager score of 96. It has changed tubular-12 (T-12) lights to T-8 lights, and auditorium incandescent to LED lights. It participates in EPA Indoor Air Quality Tools for Schools (IAQTfS), and practices IPM. The school is a drop-off site for a local community supported agriculture program.



Carmel Middle School, Carmel, Calif.

An on-site environmental education center benefits students districtwide

Carmel Middle School (CMS) is the sole middle school for Carmel Unified School District, a district that stretches from Big Sur on the Pacific Coast to Cachagua in the Carmel Valley. Drawing a diverse group of students from over 600 square miles, the district is roughly the size of Rhode Island. CMS focuses on academic achievement, balanced with an appreciation for the uniqueness of each child, which fosters a love of learning, environmental stewardship, a healthy lifestyle, and civic engagement. CMS is dedicated to providing a safe and positive learning environment where students can thrive and make meaningful contributions to their world.

The CMS campus includes the award-winning 10-acre Hilton Bialek Habitat (The Habitat), an environmental education nature center that, in conjunction with MEarth (the Habitat's nonprofit organization), offers science, environmental education, and sustainability programming. This programming, including ecoliteracy, nature studies, social studies, English-language arts, and world language, seamlessly integrates sustainability education into curriculum lessons and activities. Annually, MEarth serves over 1,000 Carmel Unified students and another 975 underserved students from the greater Monterey Peninsula at the Habitat. The Habitat's Silver LEED-certified green building was completed in 2012, and offers a living laboratory for environmental practices, earth-friendly materials and construction, and an introduction to green technology and jobs. The building is the first LEED-certified public school building in Monterey County.

The school's hallmark environmental program, called Ecoliteracy, is a six-week required course for all sixth-graders. Ecoliteracy focuses on learning about threats to biodiversity such as habitat destruction, invasive species, human population, pollution, and overharvesting. The lessons also include the study, harvesting, and cooking of fresh, local, organic, seasonal, and sustainable foods, using the Habitat's one-acre organic garden and orchard and the LEED-certified green classroom. CMS also has an extensive farm-to-table program, a produce exchange, and a visiting-chef program.

In addition to the sustainability programming and ecological restoration activities at the Habitat, CMS offers many outdoor education opportunities. Monterey Bay Outdoor Education, an intense three-day rotational program through which seventh graders experience local ecological sites including the Carmel River, Elkhorn Slough, and Point Lobos to learn from local experts about habitat protection,



environmental impacts, and environmental advocacy is very popular. Also available are field trips and hikes to local and distant sites including the Monterey Bay Aquarium, Anza-Borrego Desert State Park, and Yosemite; and Winter Outdoor Education for seventh graders at Sequoia National Park in the southern Sierra Mountains with instruction in ecology, zoology, geology, astronomy, winter survival, and winter sports.

CMS has an active environmental club, which has led schoolwide education efforts regarding recycling and reduction of single-use plastics, and has worked with a local business, EcoCarmel, to provide reusable lunch containers for every student. Since 2009, the environmental club has assisted CMS in earning the National Oceanic and Atmospheric Administration (NOAA)'s Ocean Guardian School status. These students make presentations at The Gathering (a weekly assembly of all CMS students), participate in Zero Waste Week Lunch activities each March, and, through their efforts, reduced the school's use of single-use plastic baggies by more than 10 percent in one school year.

CMS was part of the district's facility modernization in 2002-03, during which all classrooms were retrofitted with energy-efficient lighting, occupancy sensors, acoustical treatments and insulation, new HVAC systems, lead-free plumbing fixtures, and low-flow toilets. Additional retrofits continued in 2011 with induction lighting and occupancy sensors installed in the gymnasium. Demonstration solar panels on the green classroom produce approximately five percent of the energy used by the school, and CMS covers 19 percent of its electric needs through renewable energy purchased from Pacific Gas and Electric Company. A preventive maintenance plan addresses the school's maintenance needs, conducting structure inspection for leaks, spills, and water damage. Retention ponds constructed in the late 1990s hold stormwater runoff. An energy management system, installed by Johnson Controls in 2003 and upgraded in 2013, provides continual monitoring of energy use and students can view usage real-time on a dashboard. CMS has cut student paper consumption in half in just one school year through teachers distributing and receiving documents in electronic format using assignment-management software program called My School. In 2015, there will be 1:1 computing for all students, with the goal of moving paper consumption toward zero.

Susan Miller Dorsey Senior High, Los Angeles, Calif.

Comprehensive sustainability education as a leadership development model

Dorsey High School is located in south Los Angeles, a densely urban, multi-cultural area of the city. Dorsey takes an integrative, multidisciplinary approach to environmental education by leveraging local resources and developing innovative strategies and partnerships to incorporate outdoor and experiential learning; science, technology, engineering, arts, mathematics (STEAM) subjects; and career technical training. The students, 80 percent of whom qualify for free- or reduced-price lunch, make use of community engagement, collaboration, and service to build a comprehensive education in sustainability, while serving as a leadership development model for a diverse community.

The Los Angeles Audubon Society's Baldwin Hills Greenhouse Internship and Restoration Leadership programs provide standards-based programming that incorporates sustainability into outdoor education, science, art, community engagement, leadership, and college and career preparation. The program provides students the opportunity to work with biologists and restoration ecologists, and the ability to serve as researchers at the nearby Baldwin Hills scenic overlook. Students create and deliver curriculum to younger students and serve as peer-to-peer mentors, leaders, and docents. They engage the community through service learning and conduct high-level environmental research and analysis, while restoring and protecting a precious urban oasis in their neighborhood.

Dorsey's innovative Restoration Leadership Program, funded by a U.S. Fish and Wildlife Services habitat restoration grant, allows mentorship opportunities at Leo Politi Elementary and is a model for other schools. What began with Dorsey students helping to establish and plant Politi's celebrated native bird/pollinator garden has grown into a robust, continuing program whereby Dorsey students serve as role models as they help educate Politi's students on a broader basis. The habitat serves as an outdoor classroom for science, art, language arts, leadership, and community engagement, using sustainability as a framework. Since this mentorship relationship began, Politi's science scores have improved, and the young students have begun to develop a lifelong connection with the environment.

Dorsey's Eco-Club has grown from 15 original students to over 50 active members today. Together they have implemented several recycling and campus litter abatement programs, and produced the anti-littering film *An Unnatural Disaster*. In 2011, a group of seven students wrote and illustrated *Kill Your Lawn*, a comic book



to raise community awareness about the conservation value of replacing lawns with native plant species. Eco-Club members successfully led the school in diverting 28,650 pounds of materials from landfill to win Generation Earth's "Battle of the Schools" recycling challenge.

Dorsey's school garden has a thriving native plant population, installed and supported by the University of California's Master Gardener Program, as well as sustainably harvested bed gardens, donated by Victorious Green. Students learn science in the native plant garden, culinary arts students harvest and use the organic fruit and vegetables, and vocational students work in the garden as part of their programs.

The School of Business and Entrepreneurship's culinary arts program hosts a WebTV cooking show called Cooking Live with Dorsey High. Their Turkey Chili Bean Delight recipe was lauded by USDA's 2014 Recipe for Healthy Kids Challenge. The students in culinary arts also run the Popular Healthy and Tasty (PHAT) Café. The school implements Fitnessgram, hosts marathon trainings, and offers Outward Bound trips. Dorsey's humanities program integrates filmmaking, artistic expression, social justice, and environmentalism. A product of this program is the book From the Couch to the Kitchen, a writing project that incorporated students' experiences with food in tradition and in the community.

Dorsey's wellness committee provides faculty and staff with monthly nutrition and wellness updates and resources. Staff can take part in classes like cycling and Zumba, and participate in The Biggest Loser, which awards a prize to the person who loses the largest percentage of body weight in a 90-day period. The school district has a staff wellness policy, and offers additional resources for exercise and healthy eating.

Dorsey teams participated in The Aspen Challenge in 2013 and 2014. In this national competition, students are issued a seven-week challenge to offer solutions to pressing environmental issues. In 2013, Dorsey's team was one of the six finalists with their interoperability community/student partnership strategy for raising environmental awareness. In 2014, Dorsey's team designed a solar-powered trash compactor to reduce environmental impact. Through the Challenge, students used their STEM skills to produce a solution to an environmental and societal challenge.

Two new LEED Silver buildings opened on campus in 2013. The new gym and ninth-grade academy building provide high performance, healthy, and comfortable learning environments. The new buildings replaced more than 50,000 square feet of asphalt with cool roofs and high albedo permeable paving. The buildings include a demonstration solar array and manage stormwater via a rain capture cistern.

April 2015



Dorsey tracks resource use in EPA's ENERGY STAR Portfolio Manager and has earned a score of 75. In 1999, the Los Angeles Unified School District became one of the first districts in the nation to adopt an IPM program, and since has received two Innovator Awards from the California Department of Pesticide Regulation for its practices.

Dorsey High School is privileged to work with excellent partners and mentor organizations to bring sustainability education to its students. Dorsey students are scholars, environmental stewards, mentors to younger students, and natural leaders in their community.

Marin Country Day School, Corte Madera, Calif.

Turning learning into action through partnerships and year-round practice

Environmental sustainability has been a focus at Marin Country Day School (MCDS) for many years, though it formally became a part of the school's strategic plan in 2006. To advance sustainability goals, MCDS created the Environmental Oversight Committee (EOC). With broad representation, the EOC ensures buy-in and agency from all parts of the community.

MCDS has reduced greenhouse gas (GHG) emissions through careful attention to new construction equipped with green features such as daylighting, living and white roofing, and radiant heating and cooling. Photovoltaics on new and existing construction also serve to reduce GHG emissions. Water conservation and efficiency is improved through campus bioswales, landscaping, and a rainwater catchment system. The Learning Resource Center uses rainwater for toilet flushing and radiant cooling and is recognized as the first net zero energy classroom building in North America. Waste reduction efforts include employing reusable dishware and flatware on campus; using three-bin waste stations (recycle, compost, trash); and implementing green purchasing guidelines, a waste protocol, and a green events checklist for campus events. Thirty-nine percent of construction on campus qualifies as LEED Gold or Platinum. Student-led efforts, such as participation in TerraCycle and the Green Schools Alliance Green Cup Energy Challenge, are a source of pride. In the area of transportation, MCDS promotes carpooling and arranges bus routes to ensure maximum possible bus ridership, resulting in a large majority of students arriving at school via bus or carpool.

MCDS also addresses the health and wellness of students, faculty, and staff in an intentional and systematic way. School facilities are carefully maintained to support



a healthful, chemical-free learning environment. The school provides a robust physical education program, and much of the instruction takes place outdoors on playing fields, blacktop areas, and adjacent Ring Mountain. The MCDS food program almost exclusively serves environmentally preferable food. Moreover, as the school's culinary farm program grows, more and more produce comes directly from campus gardens, offering students the opportunity to be involved in the farm-to-table process. MCDS further supports the well-being of students by providing school counselors and a school nurse, and by partnering with outside agencies for education in topics including body image, human sexuality, and drug and alcohol awareness and prevention. MCDS likewise supports the wellbeing of faculty and staff through such measures as reduced-fee gym membership, an onsite yoga class, and an employee assistance program.

Finally, MCDS has worked diligently to provide environmental and sustainability education to students. The school has worked with the Cloud Institute for Sustainability and adopted the Education for Sustainability Standards. A rich program allows students at all grade levels to gain an understanding of systems, systems thinking, and the environment. Students have multiple opportunities to engage in service and civic engagement related to the environment in the kindergarten through eighth grade curriculum and through extracurricular activities. From kindergartners collecting compostable materials, to schoolwide nonnative plant abatement with partners from Marin County Parks on Earth Day, to a student-designed and led no-idling campaign targeted to parents in the carpool line, MCDS students turn their learning into action.

Working with community partners ranging from Teens Turning Green to the Golden Gate National Recreation Area, and by learning about the green features of the school buildings and how they were designed, MCDS students become aware of green career pathways they may wish to pursue. The school's extensive outdoor education programming includes trips to Joshua Tree, Yosemite, and Golden Gate National Park. The school's STEAM initiative is well underway and is a major part of the current strategic plan. Summer camps offered to the community include farm camp and a STEAM focus, providing a complete wraparound experience for students.



El Monte Union High School District, California

Partnerships promote robust sustainability learning

In El Monte Union High School District (EMUHSD), collaborative relationships enable high-poverty students to explore career options related to the environment, turn passions and talents into successful green careers, broaden academic skills, and prepare students for high school graduation, advanced education, and full participation in a sustainable society. Strategic partnerships reduce environmental impact and costs, improve students' health, and further STEM and sustainability education goals.

EMUHSD engages many government agencies in its work. The Centers for Disease Control and Prevention works with the district to coordinate health and wellness policy and activities, while Caltrans introduces students to civil engineering careers related to wildlife conservation. The Los Angeles County Whittier Narrows Regional Park allows opportunities for biking and nature study, and the Upper San Gabriel Municipal Water District sponsors solar boat project lessons on water conservation. The U.S. Fish and Wildlife Service brings lessons in water quality testing to life, and the City of El Monte coordinates and promotes Safe Routes to School. The Office of Naval Research contributes the SeaPerch program, an underwater robotics program for sustainable deep-sea engineering. The district has been successful in implementing USDA's Rethink Your Drink and My Plate campaigns; employing the Los Angeles County Office of Education for a Harvest of the Month Club, nutrition guidance, and cooking workshops for parents and staff; and water-wise gardening with the help of the City of Rosemead and Gabrieleno Tongva Indians.

EMUHSD also partners with many corporations. Cenergistic, an energy-conservation company, has helped EMUHSD change energy behaviors, generate cost savings that are re-allocated to other education priorities, and reduce the district's carbon footprint. Southern California Edison organizes a student solar roofing project for school buildings, and Vons Credit Union, Edison International, and GRID Alternatives sponsor student/community projects to install solar panels on low-income family homes. Hewlett Packard enables practical math and science experiences for students with an alternative energy greenhouse grant, while Pureology's Green Champion prize allows a special-needs campus to build a greener future. BP sponsors student wind-turbine designs, and Lowe's collaborates on Go Green community murals and paint recycling. In partnership with State Farm, students relate lessons in world history, American history, and earth science to



earthquake preparedness in low-income communities through the Quake Proof program.

Corporate partners enhance classroom discussions of diet and nutrition. The Dairy Council of California provides nutrition education in 10th grade health classes, and the district received a \$135,000 grant from Wal-Mart and the American Association for School Administrators for alternative breakfast via campus vending machines. This has been so successful that a follow-on grant will continue the campaign, using Grab 'n Go carts to further increase breakfast participation. A student-led cafeteria redesign resulted in a Smarter Lunchroom -- a 50s theme that encourages healthy eating and after-lunch fitness via dance.

Community organizations have a strong presence in EMUHSD, where 90.2 percent of students are eligible for free or reduced-price meals. Community partners include the American Association of School Administrators, coordinating health insurance enrollment and breakfast; Kaiser Permanente, for a culinary arts project providing healthy snacks to seniors in assisted living; Asian Pacific Health Care Ventures and the Children's Defense Fund, for coordinating health insurance enrollment; the San Gabriel Valley Conservation Corps, for health fair recycling; the El Monte/South Chambers of Commerce, publishing information of interest to motorists, parents, pedestrians, and bicyclists about safe school zones and improved traffic safety; Amigos de los Rios, for community tree planting; the U.S. Green Building Council (USGBC) and Eco-Tech, on permaculture gardening; El Monte Sparkle, for city cleanup; and GRID, for community solar housing retrofits. With Eco-Schools USA, a program of NWF, EMUHSD is deliberately and steadily replacing water-intensive landscaping with xeriscaping, with a strong emphasis on pollinator plants that have many community and agricultural benefits.

School community members have worked to create a mile-long walking path. One school is beginning an after-school walking club for students, staff, and parents; another school has an after-school fitness club that includes walking, running, and outdoor exercise. Office staff is encouraged to walk outdoors during breaks. In the classroom, students engineer stationary "Human-Powered T-Vehicles" bikes to power TV sets, generate clean energy, raise science scores, and lose pounds. Auto Tech students who designed, built, and installed a 50,000 watt diesel co-generation unit, converted the co-generation to biodiesel, and created biodiesel fuel from recycled school cafeteria french-fry grease.

EMHUSD collaborates with many postsecondary institutions. Occidental College's farm to school program increases student exposure to fresh fruits and vegetables, and California State Polytechnic University, Pomona provides STEM mentors for solar boat and wildlife crossing structures projects, as well as professional



development opportunities for teachers. Similarly, Rio Hondo College provides STEM mentors for a green zoo construction project and other green careers.

The district was named an ENERGY STAR Leader in 2013, and was recognized for a 10 percent Improvement in Overall Energy Performance and Top Overall Energy Performance. To reduce energy consumption, two of the five comprehensive high schools have installed energy-reducing HVAC systems and new outdoor LED lighting throughout the campuses. One hundred percent of schools have cool roofs, and in addition to outdoor LED lighting retrofits, the district uses Venn Star thermostats; low-flow toilets, toilets with Sloan valves, and waterless urinals. They have also removed turf, and installed more drought-tolerant plants.

The district makes a concerted effort to involve parents, students, staff, and others in becoming more environmentally conscious. This includes a thoughtful six-part approach to sustainability thinking, continuous improvement that leads to changes in behavior, and real-world projects that advance sustainable living.