COLORADO ALLIANCE FOR ENVIRONMENTAL EDUCATION
2012 Awards for Excellence in Environmental Education
Awards for Excellence in Environmental Education

Environmental educators across Colorado are making a difference in their communities. Through service learning, civic engagement, and encounters in the natural world, environmental education helps learners understand their role with the environment. Since 1996 the Colorado Alliance for Environmental Education (CAEE) has taken the opportunity to honor the amazing work and efforts of environmental educators and organizations across the state through the Awards for Excellence in Environmental Education Program.

CAEE President’s Award
Each year the CAEE Board of Directors selects an individual or organization to receive the President’s Award in honor of exceptional leadership for environmental preservation, sustainability, and education.

Enos Mills Lifetime Achievement Award
This award for significant achievement is named after Enos Mills, “founder” of Rocky Mountain National Park, and is presented by CAEE to an individual for long-term, outstanding achievements and contributions to environmental education. Enos Mills spent his life discovering and experiencing nature, and working tirelessly to preserve it by sharing its benefits with others through nature guiding, writing, and photography. In the fashion of Enos Mills, the award recipient has demonstrated leadership and commitment to the field of environmental education through a significant body of work. Past recipients include:

Georg Ek, 1995
In memoriam: George A. Wilson, 1996
Glen A. Hinshaw, 1997
In memoriam: CeCe Forget, 1998
In memoriam: Enda Mills Kiley, 1998
Roxanne Brickell-Reardon, 1999
Elizabeth Gardener, 2000
Oakleigh Thorne II, 2001
Mary Ann Bonnell, 2002
Shawna Crocker, 2003
Mike Way, 2004
Wendy MacPhail-Brigham, 2005
Dave Sutherland, 2005
Wendy Hanophy, 2006
Raymond Tschillard, 2007
Dave Van Manen, 2008
Patrick Emery, 2009
Lisa Evans, 2009
George Wallace, 2010
Marcella Wells, 2011

Recognition for Outstanding Retiring Environmental Educators
Do you know an outstanding environmental educator who has retired (or is retiring) from his/her professional role in education, and whose contributions to the field of environmental education deserve recognition? Are you such an educator? If so, please nominate him/her—or yourself—for the Recognition for Outstanding Retired Environmental Educators!

Environmental Education Program Awards
Initiated in 1996, CAEE Environmental Education Program Awards honor leadership in developing effective, inclusive, cooperative, and cross-sector environmental education programs. The 2012 recipients have demonstrated success in implementing innovative and inclusive environmental education programs and partnerships.

Call for Nominations! 2013 Environmental Education Awards
Do you know of a successful environmental education program in a school, business, public agency, nonprofit, or local community? Are you aware of individuals and/or organizations working together to provide quality and inclusive environmental education? If so, please nominate your program or theirs for a CAEE Excellence in Environmental Education Award!

Award categories include: Agriculture, Best New Program, Business, Citizen/Community, Government, Higher Education, Media, Nonprofit, PreK-Elementary Education, Religious/Spiritual, and Secondary Education. Visit www.caee.org to learn more and download a nomination form. Contact CAEE at 303-273-9527 or info@caee.org for more information.
CAEE’s Board of Directors is proud to honor Lise Aangeenbrug with its 2012 President’s Award in recognition for her extraordinary leadership in environmental preservation, sustainability, and education. Presently, Lise is Great Outdoors Colorado’s (GOCO) Executive Director. Through this strategic and influential position, she is responsible for the management of GOCO and its grant programs, policies, and priorities. GOCO was created in 1992 through the passage of a citizens’ ballot initiative redirecting a portion of Colorado Lottery revenue ($57 million in 2012) to help preserve, protect, enhance, and manage the state’s wildlife, parks, rivers, trails, and open spaces.

Lise has always had an interest in the importance of natural resources, as well as in the creation of opportunities and supporting diverse strategies to connect people with the outdoors. In GOCO’s early years, Lise served as its deputy director sharing her many insights and was instrumental in significantly expanding and enhancing interpretive and environmental education opportunities for visitors of all ages in Colorado’s many state parks. In 2001, Lise left GOCO to help establish the Colorado Conservation Trust and served as its director of programs until 2006. She then returned to GOCO and became its executive director in early 2009.

Lise’s first priority was to lead the GOCO Board in developing a new strategic plan to guide its grant-making decisions. While traveling across Colorado gathering public input, Lise quickly became aware that communities large and small were struggling with how to get kids outside. Consequently, in GOCO’s 2009 Strategic Plan, a new goal was included for enhancing opportunities for youth and families across all its funding areas. The new goal area: Youth, Families and the Outdoors is a fundamental and positive shift for GOCO; one made possible through Lise’s strong direction. Rob Novak, Larimer County Natural Resources Community Relations Specialist, shares “This kind of groundbreaking leadership is important to us because we have been tasked by our citizens to conserve the special places in Larimer County for future generations. But what happens if the future generations no longer see them as special?”

The GOCO Board approved and funded a comprehensive study to evaluate the possibilities and barriers for youth and families to spend time outdoors and chose Larimer County to determine what kinds of grants have the greatest impact. This regional pilot study was dubbed “Plug In To Nature” and examined access to natural places and the programming available. “Larimer County is thrilled GOCO looked to what is already happening here in regards to youth, family, and the outdoors, and recognized that this is a good place to start in assessing what this new strategic goal means for the people of Colorado,” said Kerri Rollins, Larimer County Open Lands Manager.

“Plug In To Nature” helped identify simple solutions for educational providers and agencies to make it easier for parents and teachers to get kids connected to the outdoors in meaningful ways. It also helped identify gaps and barriers and created a replication guide so other regions can duplicate this kind of study at a fraction of the cost. One of the major outcomes of this first pilot study is the creation, by GOCO, of a new school playgrounds initiative encouraging partnerships between schools and local governments to apply for funding to construct kid-designed playgrounds and natural areas near schools.

“I am pleased Lise is being recognized for her long-term, committed support for connecting kids and families with the outdoors. Lise has made a profound and positive difference in the lives of many Coloradans through her genuine interest and determination to be innovative in supporting environmental education.”

- Dean Winstanley, former Colorado State Parks Director
The Girls Advancing Scientific Progress (GASP!) After School Program is a unique, all-girls program implemented by female student scientists from Colorado State University’s (CSU) Environmental Learning Center (ELC) in Fort Collins. GASP! encourages girls’ interest and efficacy in ecological sciences and science related careers, as well as increases their awareness of the global community to which we all belong.

Through collaborative learning; activities utilizing creativity; positive, female role models; and family involvement—all proven methods for increasing girls’ interest in science—GASP! increases girls’ confidence in their environmental science knowledge and skills. The heart of the program includes six after-school sessions during which girls, in grades three-five, explore an area of ecological science, outstanding women studying or working in that field, and how girls across the globe are investigating the same topics in their particular environments. Girls learn and practice critical thinking, teamwork, problem solving, communication, and cross-cultural skills. The program also includes two family events where girls showcase their work in the sciences and participate in science activities with their families.

GASP! addresses three major challenges. Overall, advances in technology, as well as emerging global issues are increasing the need to be literate in these global issues and be able to connect with people from varied backgrounds. Furthermore, the need for more scientists and especially more women involved in the scientific profession is well documented in the United States by organizations such as the National Science Foundation. Research demonstrates girls’ achievement and interest in science increases when boys are removed from the picture during this grade range. Lastly, at a local level, CSU’s ELC adopted inclusiveness as one of its guiding values in 2009, realizing that participants of its programs were not representative of the entire community at that time. As a result, the GASP! program chooses schools with students from lower incomes and higher ethnic diversity and at least half of GASP! participants are Latina or African American.

Besides being the only program of its kind in northern Colorado, the most unique aspect of GASP! is its sister programs created in other countries. Currently, there are GASP! programs in Cape Verde, Kenya, and Panama. Involvement with these programs encourages discussion and real cultural exchange between the girls involved. Through these remarkable partnerships, the girls learn about the similarities and differences of other cultures and communities, as well as recognize that girls across the globe also engage in science and care about their local environments.

“It was a good opportunity for our daughter to appreciate science not only as an academic skill but as a fun way to learn about the environment around her—while learning teamwork skills and the importance of being a girl involved in science.”
- GASP! participant parent
Imagine creating a program that can teach young people about caring for themselves, their community, and the earth through the experience with an organic garden! This vision is at the heart of the development of Loveland Youth Gardeners (LYG), whose mission is to cultivate skills, stewardship, and service in young people through sustainable gardening and healthy living practices. LYG’s tag line is “Planting Seeds, Growing Youth, Nourishing Community” and its programs are often the first introduction for youth into the importance and meaning of stewardship and service.

LYG has been serving Loveland and northern Colorado since 1996 and has grown into three distinct youth education programs, currently serving youth ages 5-21:

• The Green Adventures Program teaches children ages 5-12 about environmental stewardship and healthy living skills through monthly classes during the school year and week-long summer camps. The curriculum incorporates gardening, science, music, creative writing, art, exercise, and nutrition.

• The Youth Gardening Program is a comprehensive summer program focusing on vocational and life skill-building, environmental stewardship, and community volunteerism for at-risk and special-needs teenagers ages 13-18. The program functions as an outdoor experiential classroom and job site. The curriculum emphasizes organic gardening practices and skills needed to lead healthy and productive lives. Youth grow produce for themselves and for low-income families. The donation of produce and involvement in service projects fosters pride, confidence, teamwork, self-esteem, and encourages participation in the community.

• The year-round Leaf Out Program, serving at-risk and special-needs youth ages 13-21, is designed to further develop vocational and life skills through a variety of classes, including cooking and public speaking, as well as volunteer projects with other groups and organizations. In 2012, Leaf Out interns tended seven gardens, including gardens at two assisted living facilities, a school garden, and several community gardens providing produce for low-income residents.

These three innovative programs directly address gaps in the community including the lack of educational resources for youth focusing on skill-building and environmental stewardship, and the lack of fresh food for low-income residents in the community.

LYG values its partnerships with a variety of organizations and businesses to better serve young people, the community, and the environment. Primary partners include: Colorado State University’s Master Gardener Program and the Entomology and Horticulture departments, High Plains Environmental Center, House of Neighborly Service, Food Bank of Larimer County, and the City of Loveland.

“I attribute much of my success in both high school and college to the lessons and strength I gained in my summer with LYG. LYG cultivates kids who have faith in their own abilities, it nurtures community, and it harvests great people who share their vision. I’m immensely grateful that I’ve had an opportunity to be a part of it.”

- Steven J., Youth Gardening Program participant
Take Charge! Student Energy Education and Action

Take Charge! Student Energy Education and Action (Take Charge!) is a statewide program delivered through Groundwork Denver since October 2010. Developed in partnership with the Colorado Department of Labor and Employment and the State Energy Sector Partnership, with funding from the American Recovery and Reinvestment Act, the program’s goal is to engage older youth to become Student Energy Ambassadors (SEAs) reaching out to their communities with information about energy efficiency, renewable energy, and green jobs. To date, over 1,500 high school and college-aged SEAs have conducted presentations and service learning activities, connected with almost 36,000 Colorado residents, and provided them with resources to reduce their energy bills and greenhouse gas emissions.

Take Charge! service activities provide SEAs opportunities to implement concrete actions, while communicating associated environmental issues with their communities. The predominant service activity is a door-to-door Porch Bulb Project, in which SEAs go door-to-door offering to swap the front porch light bulb from an incandescent to a compact florescent light (CFL) bulb. As well, SEAs educate residents about available resources that will help them reduce energy use. Before an outreach, SEAs receive training on energy and related careers. While completing the service activity, SEAs are developing skills in communication, community engagement, data collection, and hands-on implementation—skills they can use at home, in their communities, as they plan their careers, and in future endeavors.

By giving these youth diverse skills and ways to express themselves, while partnering and interacting with local entities, SEAs are making a difference in their communities and at a global level. This program provides people with the knowledge to reduce their own energy use by understanding how energy is generated, used, and wasted. Using less energy means less pollution, virgin resource extraction, and water demand, in addition to lowering energy bills. Neighborhoods selected for Take Charge! are ones with older homes and residents with lower incomes. SEAs are helping these residents who tend to have larger energy bills and less ability to pay them. SEAs return from these neighborhoods feeling empowered because of accomplishing something tangible while helping the vulnerable residents of their communities. “In an age of sound bites, political posts capped at 140 characters, and the emotional disconnect of talking to someone on a computer, there’s nothing like a face-to-face conversation to really make an impact,” shares Julian Adorney of his SEA experience.

Groundwork Denver’s Take Charge! program partners with K-12 schools, colleges, nonprofits, foundations, utility companies, weatherization agencies, youth organizations, volunteer groups, government entities, businesses, and individuals. These many partners provide informational materials, gift certificates, CFL bulbs, and much more.

“Groundwork Denver has helped me explore the outside world, to meet new people, and to be more complete as a good citizen. It is indeed helpful and needed because not everyone is motivated enough to responsibly use energy.” - Quang Nguyen, former SEA and student at Duke University
Water is a precious natural resource! We drink it, bathe in it, use it to grow food, and much more. People, animals, plants, and the planet rely on water for survival, yet learning about local water resources is often left out of classroom curricula. Operation Water Festival is a model, standards-based, water education program featuring a pre-festival learning program and day-long water festival event for Boulder and St. Vrain 4th and 5th grade students. This program engages students through hands-on activities designed to teach them where drinking water comes from and how to protect and conserve local water resources.

This scalable and replicable program facilitates opportunities for students, teachers, family members, and volunteers to enhance their knowledge about local water resources and issues and to gain an understanding of ways they can protect and conserve water for public and environmental health. A key benefit of Festival materials is the take-home Water Agent book. It features homework assignments encouraging students to work with family members to complete them. As a result, parents and siblings also learn about water protection and conservation.

The Festival includes two key components maximizing learning about water over a six-week period, in a fun, engaging way: the Water Festival Event and Pre-Festival Water Agent Program. During the festival event students experience four 25-minute long water education classes. Science educators and scientists from over 30 leading state, regional, and local science and environmental education organizations and agencies volunteer to teach a class. In addition, over 50 volunteers donate their time to help with logistics at each festival. Each year the Boulder and Longmont festivals reach nearly 2,000 students.

The Pre-Festival Water Agent Program is made possible through a generous donation from the City of Boulder Stormwater Program. It includes an orientation meeting for two Water Agents (students) from each classroom; a complete teacher’s packet featuring teacher’s guides, student worksheets, and flash cards on each water topic; and free T-shirts for all Water Agents and teachers. Colorful, water themed stickers and certificates are also given to Water Agents as incentives and all these elements are presented in a contemporary secret agent undercover theme!

The Keep it Clean Partnership in Boulder is a champion of the Festival and pre-festival program. They are a recognized water leader and provide high-quality water education resources in Colorado and nationally. The Festival is based on strong and diverse partnerships including community partners, municipal sponsors, school districts, teachers, and volunteer presenters from leading science education organizations and institutions.

“A key benefit of the Operation Water Festival is that it is really a complete program. It’s coupled with activities that happen in the classroom before the festival so students have a complete learning experience. Students take learning home and address issues about water conservation with their parents.”

- Sam Messier, BVSD Science Curriculum Coordinator
Learn More About Climate

The University of Colorado (CU)-Boulder is home to some of the world’s leading climate scientists. The Learn More About Climate (LMAC) initiative seeks to extend the reach of these scientists and share their vast scientific expertise with educators, policymakers, and citizens.

The primary goal of LMAC’s website, LearnMoreAboutClimate.colorado.edu, is to provide the most up-to-date scientific research in a user-friendly way to raise awareness and to inspire an informed dialogue about climate change. This website is organized around a series of videos featuring scientists and storytelling citizens who explain how climate change is affecting Colorado and the West. Topics include: climate and weather, water, ecology, energy, population and consumption, and conservation and education. In-depth interview footage, teacher-developed and teacher-tested model lessons, classroom tools, professional development opportunities, and links to additional CU-Boulder resources are all offered for each of these topic areas.

LMAC’s website, which averages 1,350 monthly visits, is updated frequently. Recently added content includes two new videos: “Water a Zero Sum Game,” which examines where our water comes from, and “Population, Consumption and Climate,” which features a conversation with renowned Physics Professor, Al Bartlett. In early 2013 the site will also feature a lively video series entitled “120 Seconds of Science,” in which Climate Scientist Ryan Vachon, will answer questions submitted by science teachers and students, as well as a live blog by Alex Mass, a Ph.D. student and researcher for the Institute of Arctic and Alpine Research, who will share her experiences while on a research expedition to Antarctica.

Beyond its web presence, LMAC facilitates visits and presentations by CU-Boulder scientists and faculty in communities and schools across Colorado to share their research and engage citizens and students in conversations about the science of climate change. Since its inception, LMAC has made meaningful connections with more than 25 school districts and 25 local organizations and environmental groups. LMAC has also provided professional development and in-classroom opportunities for 130 teachers, as well as made educational materials available to schools, public libraries, museums, and other environmental educators throughout Colorado.

LMAC was developed by CU-Boulder’s Office for University Outreach, which is tasked with extending campus resources to external groups across Colorado. LMAC demonstrates how a university can be a leader in climate science education, outreach, and solutions. LMAC’s project partners include: the Institute of Arctic and Alpine Research, Cooperative Institute for Research in Environmental Sciences, National Snow and Ice Data Center, Biological Sciences Initiative, Department of Ecology and Evolutionary Biology, Department of Geography, Center for Science and Technology Policy, Department of Theatre and Dance, and Mortenson Center in Engineering for Developing Communities.

“Thank you to the LMAC team for all you do to promote climate education in Colorado. I use your resources regularly and truly appreciate their ability to encapsulate the importance of climate change in an authentic and place-based context.”

- Cindy Gay, Steamboat Springs High School and Colorado Biology Teachers Association President
Children’s Peace Garden

Growing Gardens is housed on 11 acres of the last remaining agriculturally zoned land in the City of Boulder. This unique site includes a 4,000 square-foot greenhouse, honeybee hives, a worm compost bin, and a one-quarter acre used for its cornerstone program: The Children’s Peace Garden (Peace Garden). The Peace Garden was created in 2000 to teach children the importance of their interaction with the environment and how their food choices and food production methods effect the environment and their own lives. One child shares, “I liked the flowers, the butterflies, tasting the honey, seeing the bees wiggle their butts.”

The Peace Garden uses an urban agriculture model to teach children about the environment. Children begin to view the environment, not as a wilderness area or protected resource, but as a part of their everyday existence and learn that their choices and actions have an immediate effect on their bodies, as well as within their community. The program serves very diverse populations and hosts over 3,500 children a year, ages four-ten. Participants attending summer camps or visiting on school field trips have the opportunity to eat food directly from the garden thus increasing their understanding of the food source. There are numerous themed garden beds in the Peace Garden planted with foods familiar to children, including: pollinators, edible flowers, salads, salsas, and pizza. Large numbers of children report trying a new vegetable while visiting the garden. One participant shares, “Vegetables make you strong, help you stay skinny, and give you nutrients.”

Children are directly impacted by the garden and gain a deeper connection with the earth while they are digging in the ground and getting their hands dirty. They plant seeds, transplant plants from the greenhouse into the garden, and help weed in the garden beds. The Peace Garden Curriculum fosters a direct link from lesson to active practice and final acquirement of skills useful to children throughout their lives, such as learning to plant, cultivate, harvest, and prepare simple food recipes. There is a direct connection to what they are learning and the opportunities for application.

There is also a focus on biodiversity in the garden and in relation to diversity in each child’s own community. The garden serves as a learning tool where all insects and plants, be they beneficial or harmful on a singular level, play an important role in the overall health of the garden making discussion about inclusivity in children’s communities possible, while emphasizing the importance of each individual in the health of the larger community.

“We went from, ‘Kill the Bugs!’ to, ‘Don’t hurt the Bugs!’”
- Andrew Gross, Children’s Peace Garden participant
Thorne Nature Experience (Thorne) was founded in 1954 by Dr. Oakleigh Thorne II and is celebrating 59 years of connecting kids with nature. Thorne’s Boulder Valley School District (BVSD) 4th Grade Field Trip Program was created in 1999 through a partnership with the City of Boulder Open Space Department (OSMP) and the BVSD. The program engages over 1,600 BVSD 4th graders annually, during the fall and spring, with day-long field trips to the 45-acre Sombrero Marsh Wildlife Preserve (Sombrero Marsh). At Sombrero Marsh students learn about birds, wetland ecology, seed dispersal, and water pollution during this free program. Thorne provides the educators and manages the program while BVSD provides buses and helps ensure these field trips are integrated into the core science curriculum for 4th grade. Sombrero Marsh is managed by OSMP and allows a maximum of 60 students per field trip on one day. Students are divided into four groups that rotate through stations maintaining low student-to-teacher ratios and allowing for quality education that maximizes student investigation and exploration.

Each of the four field trip stations is designed with multiple learning styles, hands-on, and joyful education in mind. The curriculum was collaboratively designed by Thorne, BVSD, OSMP, and the Keep It Clean Partnership. Activities range from the use of senses on a silent hike, bird and wildlife viewing with binoculars, wetland exploration, and a visual/tactile examination of unique specimens making the programs engaging and inclusive.

Beginning in spring 2011, Thorne started an innovative, formal internship program. Each semester, Thorne recruits 12 interns of various ages and backgrounds and trains them to teach one of the four stations. Interns receive nearly 50 hours of quality, mentored teaching instruction giving them the opportunity to hone their teaching and naturalist skills.

When students come to the marsh they are struck by the beauty of this site that is home to many migratory birds, and they usually find coyote and fox scat. One student shares, “I can’t believe I caught a toad!” At the water pollution station students learn about non-point source pollution and things they can do in their everyday life to limit the amount of pollution entering streams or water systems similar to Sombrero Marsh. Students hear the recent human history of the area and that, not long ago, this place used to be a dump and that a few people with good intentions came together to restore Sombrero Marsh as a healthy wildlife habitat. Students leave with a sense of stewardship and desire to explore natural spaces as often as they can!

“I honestly think I learned as much as the kids—great balance of knowledge, engagement, and fun. I feel great about the internship and would suggest it to anyone even considering a career in the field.”
- Field trip intern
Project Learning Tree

Environmental Experiences for Early Childhood

Project Learning Tree’s (PLT) Environmental Experiences for Early Childhood is an early childhood education program sponsored by the Colorado State Forest Service. Developed by and designed for preschool educators and early childhood specialists working with children ages three to six, Environmental Experiences for Early Childhood includes over 130 experiences that engage children in outdoor play and exploration. Because exploring nature is a complete sensory experience, early experiences with the natural world excite children’s imaginations and foster their inborn sense of wonder and curiosity, as well as being important motivators for future learning. The introduction of environmental education during these early childhood years reaches children at a key developmental period in their lives and has the potential for influencing lifelong attitudes, values, and patterns of behavior toward the natural world.

The PLT program was established in 1976 by the American Forest Institute to provide activities and training for PreK-12 grade educators in all states and many countries who can, regardless of their backgrounds, immediately and with confidence, begin to infuse scientifically sound, interdisciplinary environmental education into their existing curricula. Environmental Experiences for Early Childhood, is delivered by partners across Colorado through a network of highly qualified, diverse facilitators who conduct workshops presenting both early childhood and environmental education strategies with this special activity guide and accompanying music CD. Workshops are hosted by childcare centers, cultural institutions, and county childcare councils.

To date nearly 1,000 Colorado educators have been trained to use this activity guide, which is organized into thematic units appropriate for young learners. All experiences are developmentally appropriate and model differentiated learning, and include materials lists, vocabulary words, questions to engage the youngest learners, pages to help teachers connect with family members so learning can continue at home, and background information for teachers who may not be familiar with the science concepts that lie behind the activities. Additionally, each of the 11 themes includes music, movement, snacks, crafts, reading, and exploration indoors and outdoors. The music CD contains recordings of nature, original songs about trees, and classical music selections related to the nature activities.

PLT is partnering with the Clayton Early Learning Center in Denver to effectively reach and train diverse early childhood educators while providing complementary resources. PLT teaches both educators and students “how to think, not what to think.” Early childhood educators and licensed caregivers participating in workshops may apply training hours towards attaining and maintaining their required educational accreditation.

“The early childhood program is exciting and popular because it provides a toolkit of thematic and developmentally appropriate ways to support young children as they naturally do what scientists do: explore, investigate, and experiment again and again! Whether users are caregivers, educators, or researchers, PLT activities make it fun and easy to connect children with nature through their senses, neighborhoods, and family experiences!”

- Shawna Crocker, Colorado PLT Coordinator and PreK-HS science teacher

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Project Learning Tree

Environmental Experiences for Early Childhood

PreK-Elementary Education Award
Alliance for Climate Education (ACE), a nonprofit organization, began operating in Colorado in January 2010. A national organization, based in northern California, ACE has staff working in 15 metropolitan areas across the United States. Its mission is to educate high school students about the science behind climate change, to inspire them to take action, and to provide the skills and opportunities to raise their voices about climate change. In Colorado alone, ACE has reached over 90,000 students in 145 schools and received an award for the 2011 Climate Change Communicator of the Year.

ACE offers a variety of programming including its award-winning science presentation, which gives students the facts, knowledge, tools, and confidence to accomplish sustainable projects in their schools and communities. ACE educators present “climate science that sticks” at schools nationwide, which resonates with students via an in-school assembly blending dynamic storytelling, cutting edge animation, music, and video, all to which high school students can relate. Based on an evaluation study by Loyola University, there is a demonstrated improvement in student’s understanding about climate change. From ACE’s assemblies, to student leadership training, these programs are offered without cost, ensuring every district, school, and student is offered the same science, skills, and strength they will need for the future.

After an assembly, ACE helps establish and support student-led Action Teams in each school to accomplish carbon-reducing projects—from implementing recycling to energy audits. ACE supports 40 active Action Teams in Colorado, offering national competitions and campaigns each school semester, giving teams opportunities to work towards grants, prizes, and team bragging rights. Greeley Central High School’s Action Team won the Biggest Loser: Energy Competition for Fall 2011. This Action Team enrolled 22 classrooms, shed 31,502 pounds of carbon dioxide, and saved their school $2,333 in energy costs.

ACE’s Leadership Training brings together motivated, creative high school students from all over the region for one-day sessions on a variety of topics that include science, project management, and fundraising. Creating multiple opportunities for students to participate, ACE conducts five leadership trainings throughout the school year in Colorado, which has trained over 150 students to date.

ACE loves teachers too! Working hard to make their job a little easier, ACE provides teachers the best resources available to teach about climate science. Resources include the ACE assembly worksheet for students to complete during the assembly (although the assembly will keep their attention on its own!), pre- and post-ACE assembly lesson plans and discussion guides, climate and energy lesson plans, curricula, and teacher newsletters.

“ACE inspires students to be a part of the solution by becoming the solution.”
- JD Prater, ACE Senior Educator
In 2009 the Colorado River Water Conservation District approached the Keystone Science School (KSS) in Keystone, Colorado, to help create and implement a water education program designed specifically for secondary level students. The result, H2O Outdoors, is a three-day, standards-based, educational water program available to high school students across the state. The program is offered each spring and fall for 30 high school students that are selected to participate. During the program students explore real-world water management issues through a unique combination of outdoor, experiential learning and policy role-playing opportunities.

Aurora Water and Denver Water departments became program partners in 2010 with H2O Outdoors. Each of the partners sponsor student participants, offering the experience to them for a small administrative fee, and work closely with KSS to recruit a diverse group of students from across Colorado. In an effort to reduce barriers for student participation, KSS provides transportation to Keystone through funding provided by the partners.

At the beginning of each H2O Outdoors program, students come together to stand atop the Continental Divide and actually view the source of their water. They also become aware of water issues in the West and in Colorado specifically, and learn to network and cooperate with a diverse group of students. The program is very hands-on and students experience a wide variety of activities: testing snow pack for water content, getting in streams to conduct on-site water quality tests, and studying during floating seminars on Dillon Reservoir.

Program participants interact with experts who are working to solve water related challenges facing Colorado and collaborate with fellow students to create water management policy recommendations. Students take on the role of a specific “water stakeholder” and gain an understanding of that stakeholder’s position about Colorado’s water issues. The program concludes with a powerful town hall-style meeting at which all student stakeholders listen to each other’s position and strive to come to consensus on a set of public policy recommendations that best meets the needs of all constituents.

The aim of H2O Outdoors is to provide high school students with insight into the complexity of Colorado’s water resources. In order to evaluate its success, KSS implemented a quantitative evaluation of the program’s outcomes using pre- and post-survey instruments. The data demonstrates student growth in knowledge of the effect of water issues, broadened perspectives, and increased scientific inquiry. Additionally, the data indicates students leave the program with a sense of empowerment and an interest in taking further action. The program provides background knowledge and experiences students will need to be active community members and informed citizens regarding water and its use in Colorado!

“I have learned a lot in the last two days. It’s probably a thousand new things beyond the five that I knew already. I learned everything from the politics of water to the health and safety of our streams and the people who use them.”
- Nan Peck, 15-year-old program participant
Cyndra Dietz

If recycling, and its limitless opportunities for implementation in schools, ever had a true visionary, it is Cyndra Dietz. Cyndra has been creating and innovating as an environmental educator for 33 years and since 1990 she has directed Eco-Cycle's Boulder/Broomfield County School Recycling and Environmental Education Program. Her reputation for delivering consistently high-quality programs has earned her the respect and loyalty of city, county, and school district officials. Through consulting, trainings, conferences and publication of articles, and curricula, Cyndra has mentored countless fledgling recycling programs throughout the United States and Canada. Her programs have received many state and national awards, recognizing her outstanding and innovative efforts.

During Cyndra's tenure at Eco-Cycle her staff has grown from one to eight, enabling her to coordinate the delivery of over 1,600 presentations in three school districts: Boulder Valley, St. Vrain Valley, and Adams 12, for over 48,000 K-12th grade students and staff each year. In addition, Cyndra has raised over $2 million in outside funds to bring unique environmental programming into these schools. Topics include recycling, composting, Zero Waste, holiday and lunch-time waste reduction, litter prevention, household hazardous waste, forest ecology, rainforest issues, air quality, indoor air pollution, and energy conservation. In addition, the collection system Cyndra created for school recyclables is considered one of the most effective nationally. Her Green Star Schools program is the first comprehensive Zero Waste schools program in the nation. The collection of compostables from the entire school building along with the collection of recyclables and diverse waste reduction projects, reduces each participating school's trash by an impressive 65 percent.

Cyndra has developed many pioneering projects during her career. The Children’s Used Book Project, created by Cyndra in 2003, has distributed over 103,000 used kids’ books to Green Star Schools (for fundraisers and student incentives) and to at-risk, underprivileged, and migrant children served by 30 Denver Metro-area charities. In 2006, Cyndra initiated a crucial national debate about the safety of micro-plastics contamination in compost (from plastic-coated paper products like milk cartons and paper cups collected by school and municipal compost programs). She is leading the national discussion on this threat. Cyndra also organized the first Colorado Zero Waste Schools Symposium in 2012 sharing state-of-the-art operational and educational strategies developed through her programs, and providing a forum for others to share their successes. Currently, she and her staff are developing a Zero Waste Schools guide to be available online, along with an interactive best practices portal, for use by anyone around the world.

Cyndra’s job is not easy. She continues to overcome many obstacles: an ever-present need for funding, teachers who have less and less time to devote to new activities, and school staff members who are resistant to new ideas; but she doesn’t give up and always finds a way to make things work, creating a win-win for everybody.

“When Cyndra first accepted the job at Eco-Cycle 23 years ago, she told me she ‘had some new ideas,’ and boy, did she have ideas! Cyndra’s ground-breaking programs, including the first-in-the-nation Zero Waste Schools program called Green Star Schools, have changed our community. I am often told by staff from the University of Colorado what an environmentally literate group of kids are growing up in Boulder County. I credit this to Cyndra’s work. Her programs have been recognized as the best recycling and Zero Waste Schools programs in the nation!”

- Eric Lombardi, Eco-Cycle Executive Director
What is CAEE?

The mission of CAEE is to serve all sectors of the Colorado community by improving the collective effectiveness of environmental education (EE). CAEE enhances Colorado’s EE community by providing professional development opportunities, coordinating support services, and facilitating communication and networking between Colorado’s EE providers and the public. CAEE was incorporated as a 501(c)(3) nonprofit organization to serve the shared interests of public agencies, businesses, educators, community organizations, and individuals distributing and using EE.

Priority Programs and Services

CAEE is a national leader in innovative and inclusive approaches to statewide EE capacity building. Four key strategies anchor and guide CAEE’s EE programs and services: Connect, Educate, Empower, and Influence. Recent examples of these key strategies include:

• CAEE is the hub and premier resource for educators to connect with the resources and partners they need in providing high-quality EE in Colorado through CAEE’s Online Directory.

• CAEE provides multiple professional development opportunities that enhance the knowledge and skills of environmental educators, including the Annual Teaching OUTSIDE the Box Conference in Denver, Colorado, April 26-28, 2013.

• CAEE is empowering leadership and inclusiveness within the EE community by leading the way in providing support and resources for a more inclusive EE professional field, organizations, and programming. CAEE’s Blueprint for Inclusiveness serves as a guiding document for its initiatives.

• By building support for EE with leaders and decision makers, CAEE is influencing the creation of a coordinated strategy to ensure all learners have access to quality EE. CAEE worked with the Colorado Department of Education to create a Colorado Environmental Education Plan, which was adopted in December 2012 and will impact 800,000 learners across the state.

CAEE Membership

Become a member of CAEE and become a part of the largest professional organization for environmental educators and supporters in the state. CAEE supports its more than 750 members by advocating for the field and facilitating professional development and networking opportunities. CAEE provides members with relevance and connections, as well as an instant network of other educators, programs, resources, workshops, and many other benefits including:

• Monthly newsletter with invitations to participate in networking events and member discounted professional development opportunities

• Opportunities to influence state EE priorities, opportunities, programs, and services through the statewide EE Advisory Council

• Opportunities to develop leadership and network as part of one of the many CAEE committees advancing EE in Colorado

Membership Rates

Student or Teacher: $15/yr * Individual: $35/yr * Organizational: $65/yr * Corporation: $500/yr

Join at www.caee.org or by contacting the CAEE office.

CAEE Staff

Katie Navin, Executive Director
Jenn Rieskamp, Program Coordinator
Malinda Mochizuki, Community Engagement Coordinator

2012 CAEE Board of Directors

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Our Sponsors
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Our Graphic Designer
With sincere gratitude, CAEE thanks Kate Peabody for her extraordinary in-kind contribution of designing the 2012 Awards Program booklet. This is actually Kate’s fifth year designing this prized component of CAEE’s Award Program! As CH2M HILL Communications Strategist, Kate lends her environmental enthusiasm to communications, public outreach, and education in the water and engineering sector to help shape and improve our global community for generations to come.

Our 2012 Awards Committee
CAEE wants to thank the volunteer members of the 2012 Awards Committee:
Kristin Libberton, Chair, City of Boulder-Keep It Clean Partnership
Maggie Bixler, The Wildlife Experience
Roxanne Brickell-Reardon, Impact Conservation Services
Natalie Brower-Kirton, Aurora Water
Karin Hostetter, Interpret This
Ashley Millman, Bluff Lake Nature Center
Sharon Moore, CSU Extension Jefferson County
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Tim Sandsmark, Lookout Mountain Nature Center, Jefferson County Open Space
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Liz Wickard, City of Aurora Parks, Recreation and Open Space

These Awards Made Possible by

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