

2015-2016 District Nominee Presentation Form

CERTIFICATIONS

District's Certifications

The signatures of the district superintendent on the next page certify that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

The district has been evaluated and selected from among districts within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.

The district is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.

OCR has not issued a violation letter of findings to the school district concluding that the nominated school district has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.

The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.

There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.

The district meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2015-2016 District Sustainability Award

Name of Superintendent: Dr. Sandra Smyser

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

District Name: Poudre School District (As it should appear on an award)

Address: 2445 LaPorte Avenue, Fort Collins, CO 80521

Telephone: (970) 490-3607 Fax: n/a

Web site/URL: http://www.psdschools.org E-mail: ssmyser@psdschools.org

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Date: 1/13/2016

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Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

The district is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.

The district meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Colorado Department of Education

Name of Nominating Authority: Mr. Richard Crandall, Commissioner of Education

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Date: 1/24/2016

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your district is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments, being sure to cover equally all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only districts that document progress in every Pillar and Element can be considered for this award.

SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: March 31, 2018

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

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Colorado Green Ribbon Schools – District Sustainability Award 2015-16 Application - Colorado

DISTRICT CONTACT INFORMA	ΓΙΟΝ			
District Name: Poudre School	Distric	ct		
Street Address: 2445 LaPorte	Avenu	e, Fort Collins, CC	0 80521	_
Website: https://www.psdsch Facebook page:				

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Summary Narrative

"PSD is proud of its history and tradition of supporting a more sustainable community. In the last two decades, PSD has led the state and nation in sustainable initiatives including being home to the country's first LEED Gold certified school, being one of three school districts invited to participate in the national Better Building Challenge, and rating as a ClimateWise Platinum Level Partner for the City of Fort Collins." – Dr. Sandra Smyser, Superintendent of Schools

Poudre School District (PSD) is an award-winning, nationally recognized leader in energy conservation, green building, and health and wellness. PSD's commitment to sustainability began in 1994 with the formation of the Energy Efficiency Team, a group tasked with coordinating sustainable efforts and defining sustainable goals. After establishing the Green Team in 1999, PSD began researching sustainable products, sustainable design guidelines, energy efficient commissioning, and building performance and used this foundation to help support the 2000 Bond program that yielded some of the top performing schools in the state: Fossil Ridge High School, Kinard Middle School, and Bethke Elementary School.

Building on a strong foundation and commitment to sustainability, the results of the district's efforts have been significant — since 1994, PSD has completed 260 energy efficiency projects resulting in a utility savings of over \$2 million, and a greenhouse gas emissions have been reduced by over 5,000 tons since 2005. The district has been recognized by numerous local, state, and national organizations, including being the first school district in Colorado to be awarded the Environmental Leadership Award, having the first Gold LEED-certified school in the nation under the LEED for Schools category, and earning the first Energy Star rating for a school building under the "Designed to Earn" designation.

Building off the successes of sustainable construction, the district reaffirmed its commitment to sustainability by adopting a Sustainability Management System (SMS) in 2006. This SMS extends the principles of sustainability across district operations and provides an integrative and collaborative approach to work toward reduction goals while supporting the district's educational mission through fiscal responsibility. PSD builds upon the SMS by publishing its Annual Sustainability Report, which highlights sustainable accomplishments, innovative practices, and goals from departments and schools across the district. Now in its seventh year, this report involves 33 departments and 12 schools, and contains five key topic areas: resource conservation, greenhouse gas emissions, sustainable education, transportation, and health and wellness.

PSD integrated health and wellness into its sustainable mission in 2010, acknowledging that health and wellness helps to foster and support sustainability goals by working to develop partnerships with local public health groups, encouraging walking and biking to school, educating students and staff on wellness topics, and recognizing how district facilities influence physical and mental wellness as a whole.

With student achievement as PSD's first priority, environmental education and sustainability has been integrated into the classroom through collaboration with administrators, teachers, staff, and outside entities to establish learning opportunities. Using the District Ends as a basis, these learning opportunities focus on four key component areas: foundations for success, success in a changing world, above and beyond, and connections.

Spearheaded by district administration, PSD's sustainability program is truly a team effort, with support and participation coming from students, staff, community members, and outside entities. Past sustainable efforts, awards, and achievements, combined with a vision of a better future, demonstrates why PSD embodies the tenants of the Green Ribbon Schools program.

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Pillar I: Reduced Environmental Impact and Costs

Element IA: Improved energy conservation/energy-efficient building(s)

The Board of Education adopted district policy ECF – Energy Conservation in 1996, providing a framework to develop short- and long-range strategies for implementing, monitoring, and evaluating PSD's energy conservation and efficiency program. In 2006, PSD developed the Sustainability Management System (SMS) to document and track energy conservation procedures that maximize energy savings potential and reduce utility expenditures.

As a part of the SMS, PSD is striving to reduce greenhouse gas (GHG) emissions by 20% as compared to the 2005 baseline year. Since the 2005 baseline year, PSD has reduced:

- Electrical use by 13% with a decrease of 3,215,864 kilowatt hours (kWh) or 2,552 tons of greenhouse gas emissions.
- Natural gas use by 18.5% with a decrease of 279,188 therms or 1,667 tons of greenhouse gas emissions.
- Cumulative greenhouse gases by 14.49% with a decrease of over 5,000 tons of greenhouse gas emissions.
- Energy Use Intensity (EUI kBTU/sf/year) by 18.4% from 109 to 88.9.

These energy savings occurred as PSD's square footage increased by 11.98% from 3,677,951 square feet in 2005 to 4,118,421 square feet in 2015. Adding tempering and/or cooling to 18 sites as part of the 2010 bond continues to be analyzed to determine what, if any, impact these systems had to GHG reductions.

PSD's 2006 Energy Plan was a combination of three documents: Technical Specifications, which identify sustainable equipment and material standards; Sustainable Design Guidelines, which define the sustainable aspects of buildings such as geothermal use; and the Sustainability Management System, which documents the strategies in place to meet energy and sustainability goals. PSD is currently in the process of updating the Sustainability Management System strategies and reporting format. As part of this update, PSD realized the need to create a separate 2015 Energy Plan master document. This new document outlines the methodology for achieving energy goals and strategies including funding sources, partners, and training. Goals incorporated into the 2015 plan include:

- All new buildings will be designed with the intent of being ZNE (Zero Net Energy capable) by 2025.
- Building retrofits will achieve EUI ratings of at least 53 by 2025
- District-wide reduction of EUI by 20% over the 2005 baseline by 2020
- Increase in use/purchase of renewables by 80% over the 2015 baseline by 2030

Energy Conservation

In 1994, PSD formed the Energy Efficiency Team (EET), which was tasked with allocating funding for energy efficiency projects. Through the EET, over 260 energy efficiency projects have been completed resulting in a cumulative savings of over \$2 million. Rebates generated from these projects are returned to the EET to fund new projects, creating a regenerative cycle for sustainable improvements. Examples of these energy savings projects include:

- Integrating exterior lighting into the building automation systems.
- Reinsulating the exterior of the west classroom wing at Blevins Middle School to achieve R17 insulation, contributing to a reduction in total energy use of 8% from 44 kBtu/square foot to 40.3 kBtu/square foot.
- Interior and exterior lighting upgrades to LED fixtures.
- Implementing shutdown practices through building automation systems for non-school days.

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- Installation of variable frequency drives (VFDs) on HVAC equipment.
- Implementing a comprehensive preventive maintenance program to address energy conservation measures such as building envelop and equipment operation.
- Upgrading the Utility Manager Software program to enhance coordination with Energy Star software and to provide better data analysis for greenhouse gas tracking.
- Commissioning processes for all major construction and renovations.
- Participation in the City of Fort Collins' 2015 Climate Action Plan Strategic Initiative Teams.
- Working with site-based green teams made up of students/staff with parent and community support for energy reduction and sustainable practices. 100% of comprehensive high schools and 90% of middle schools have green teams. (See Pillar 3 for examples of school specific activities)
- Facilitated by district administration, PSD's Green Team is being reinvented to focus on emerging technology and operational resiliency. Green Team membership is comprised of representatives from: Child Nutrition, Curriculum, Environmental, Facility Services, Human Resources, Information Technology, Outdoor Services, Planning, Design & Construction, Purchasing, Transportation, and Wellness. Examples of projects are included throughout this application.

Since 2000, PSD has been an active participant in the Energy Star program. District schools and support buildings have earned 310 awards. In 2015, 37 schools or 74% and one office building earned the Energy Star distinction, with 19 schools or 38% earning ratings over 90 and two schools or 4% earning perfect scores of 100. In addition, Kinard Middle School was honored by Energy Star in the 2009 *Celebrating a Decade of Energy Star Buildings* retrospective as the first Energy Star-labeled building that had also earned the 'Designed to Earn' designation.

Green Buildings

Developed in 2000, updated in 2005, and currently undergoing revisions, PSD's Sustainable Design Guidelines provide a framework for desired performance outcomes for new construction and illustrate sustainable design strategies and concepts to employ during the planning and design for new buildings.

With this basis, six new energy efficient schools and one office building were constructed during the 2000 Bond program, including LEED Silver-certified Fossil Ridge High School, and Bethke Elementary, the first school in the nation to achieve the Gold Certification under the USGBC's LEED for Schools category. Bethke is also Green Globes Certified, earning three of four Green Globes. PSD is currently reviewing its Technical Specifications to incorporate lessons learned and new industry trends in an effort to provide uniform environmental goals for all new construction and renovation projects.

Long range planning (LRP) is part of PSD's work to create positive learning environments for students and staff in every building. As PSD plans for new construction and infrastructure improvements to new buildings, key components of the current LRP process are sustainability and energy conservation assessments.

Renewable Energy

To supplement energy efficiency projects and programs, renewable energy is generated and used at four district buildings. Bethke Elementary, Fossil Ridge High School, and the Webster Barn (a district support building) generate electricity through a photovoltaic system for a total of 27.81kW district wide. Wellington Middle School generates electricity through a wind turbine installed as a part of the U.S. Department of Energy's Wind for Schools program. This wind power provides 1% of the site's power needs. At Bethke Elementary, an average of 3,000 kWh of electricity is generated and returned to the grid, resulting in an average monthly rebate from Xcel Energy of \$300. This system meets roughly 10%-

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12% of the building's electric needs. The Webster Barn system meets 100% of the site electrical needs, while the system at FRHS provides 1% of the site's electrical needs. These renewable energy systems are also used as teaching tools, with energy kiosks demonstrating how power is generated and consumed by building occupants.

Two buildings utilize geothermal heating and cooling systems – Kinard MS and the Operations Center. Systems provide 98% and 100% of the buildings' heating and cooling needs, respectively.

Energy Conservation in Technology

All district computers are programmed remotely to sleep or hibernate overnight, reducing energy use by up to 75%. In addition, cloud-based applications and programs are utilized in order to decrease HVAC requirements and heat loads in PSD's central data center, and data center servers are being virtualized and consolidated to further decrease energy consumption.

Element IB: Improved water quality, efficiency, and conservation

PSD buildings located in Fort Collins, Wellington, Timnath, and LaPorte are supplied by public water utilities, which test for lead and contaminants on a prescribed schedule. Potable water is delivered to three mountain schools located in Livermore, Red Feather, and Stove Prairie and stored in water tanks on-site which are tested weekly for water quality. Municipal Separate Storm Sewer System (MS-4) compliance is monitored at five district sites as required by the Colorado Department of Public Health and Environment.

Since 2006, water use has decreased from 34.31 gallons/square foot to 23.27 gallons/square foot in 2015 – a decrease of 32%.

In conjunction with the 2010 Bond, toilets and urinals are being replaced with more water-efficient fixtures. Approximately 384 gallons of water daily, or 69,120 gallons per school year, will be conserved at each site with these upgraded fixtures. At the present, 60% of schools have been retrofitted.

District irrigation systems are centrally controlled and can be accessed remotely to set parameters based on weather and turf conditions. Systems are tied into weather stations and do not allow watering to occur during or after rain. The central system also provides technicians with real-time data on system performance, potential leaks, water use, and sends out notifications when there is a break in a line, broken sprinkler head, or other maintenance problem to help prevent unnecessary water use. Customized soak cycles are set based on site or seasonal conditions to eliminate run off as much as possible. Irrigation systems utilize precision spray nozzles which reduce water use by 33% to 50% per zone. Irrigation system filtration systems were upgraded in 2013 to include a better flushing mechanism, resulting in cleaner water and fewer clogs.

Ecologically Beneficial Uses

Native and drought tolerant (water efficient) landscaping is in use at Bacon Elementary, Bethke Elementary, Kinard Middle School, and Zach Elementary. To eliminate irrigation and reduce maintenance costs, artificial turf play surfaces were installed at Dunn Elementary and Harris Bilingual Elementary and artificial athletic field surfaces are in use at Kinard Middle School, Fossil Ridge High School, and French Field District Stadium. 14 schools (28%) have gardens, while 26 schools (52%) have outdoor learning areas. Many sites have bio swales, retention ponds and impermeable surfaces to help with water quality and storm water management. Outdoor Services utilizes a one application fertilizer with a delayed use formula which prevents the fertilizer from rapidly flushing through the soil, resulting in better turf conditions, less initial water use, and better soil conditions. PSD maintains a substantial portfolio of raw water, which is used solely for irrigation purposes at 19 district sites. Using raw water reduces the water treatment infrastructure required to support the community's water supply, and reduces the amount of domestic water consumed by PSD by an average of 118,611,000 gallons

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annually. PSD and the City of Fort Collins have cooperative agreements in place to share raw water resources and maintenance such as at Fossil Ridge High School where PSD provides irrigation for nearby Zach Elementary as well as two City of Fort Collins parks.

Element IC: Reduced waste production and improved recycling and composting programs Waste Reduction

Through active recycling and waste reduction programs, PSD has increased the district wide diversion rate from 10% in 2006 to 47% in 2015. Solid waste has decreased by almost 50% over the 2005 baseline year, totaling a 405 ton or 46% reduction in greenhouse gas emissions.

During the 2014-2015 school year, PSD diverted over 1,226 tons of recycled materials from the landfill including: 885 tons of single stream recycling, 66 tons of organic material, 13 tons of scrap metal, 30 tons of shredded paper, 224 tons of composted material, and 8 tons of plastic. This was an increase in recycling of 121 tons or 11% over the 2013-2014 school year. Waste reduction activities include:

- Milk and juice carton recycling program through which over 1.8 million milk cartons and 700,000 juice cartons are recycled annually.
- Discarded electronics are recycled or repurposed responsibly through Goodwill.
- Annual trash and recycling audits are conducted at each district location to ensure container size
 and pickup frequency meets the needs of the building and improve the efficiency and accuracy of
 trash service and calculations of diversion rates.
- Shrink wrap recycling process at the District warehouse where shrink wrap and bubble wrap is collected, compacted, and recycled.
- Hydration stations installed to encourage students and staff to eliminate single use plastic bottles.
- Education, training, and audits provided by PSD's trash, recycle, and compost hauler.
- China fixtures are diverted from the landfill through participation in the City of Fort Collins' Toilet Recycling Program where fixtures are crushed and used in asphalt road base.

Waste Reduction Efforts by Students

Student-led initiatives include:

- Bennett Elementary students made their annual chili supper a zero waste event, using compostable cutlery, plates, and bowls, and taking all leftover food to a local composting company for disposal.
- Kinard Middle School students built a mobile composting station for their lunch room to encourage their classmates to participate in their composting program.
- A wooden barn at Cache La Poudre Elementary was deconstructed by Poudre High School's
 Geometry in Construction students and recycled instead of the barn being demolished and sent to
 the landfill. Wood salvaged from the project was donated to a local furniture company and
 converted into benches.
- Fossil Ridge High School holds an annual electronic waste drive.
- Wellington Middle School students participate in the Green Apple Day of Service "no waste" lunch day.

Purchasing

A goal of PSD's current SMS update is to develop criteria for green purchasing. A 75% diversion rate was established by Planning, Design & Construction (PD&C) for all new construction, remodels, or

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infrastructure improvements and contractors are required to meet the diversion rate. PSD uses a website to showcase surplus materials and equipment available for reuse. For electronics orders, PSD requests "coffin" packaging in which 15 devices with minimal packaging are sent per box instead of each device being boxed individually, resulting in an 80% reduction in waste. 90% percent of electronic products purchased are E-PEAT-certified. Most paper products purchased, including printer paper, tag board, construction paper, and bond paper are comprised of 30% recycled content and meet requirements outlined in district policy ECF. Paper towels and toilet paper are made of 30% recycled material.

The Custodial Department uses a Green Seal-certified general purpose cleaner and graffiti remover.

Element ID: Use of alternative transportation to, during, and from school

PSD encompasses 1,856 square miles of mountain and plains terrain in northern Colorado. PSD currently buses 13,000 students, totaling 48% of the student population. Transportation provides busing to 86% of schools. PSD's sustainable goals for alternative transportation are set in collaboration with PSD's wellness program and the Sustainability Management System plan.

Transportation Services

Sustainability opportunities for Transportation Services include: increasing busing efficiency and capacities, encouraging alternative transportation such as walking and bike riding, reducing transportation demands including vehicle miles traveled, employee/student incentives for alternative transportation, development of alternative fuels fleet, and increasing partnership levels with Fort Collins' mass transit systems for coordination of city routes and school start times.

Transportation Services implemented idling guidelines for all district vehicles; guidelines are based on recommendations from the Environmental Protection Agency and the American Lung Association and are intended to reduce idling times, decrease vehicle emissions, and provide healthier environments for students, staff, and the community.

178 buses (100%) are outfitted with GPS tracking, and with this system, idling times, miles per gallon, and driving habits are monitored and inefficiencies are identified. Data collected is used as a teaching tool to educate drivers on ways to cut idling times and decrease emissions. In addition, GPS has aided the department in identifying inefficiencies in route times and scheduling, eliminating the need for one bus and reducing vehicle miles traveled (VMTs) by over 9,000 annually.

Transportation Services purchases buses with clean diesel technology, which reduces emissions by 99% for nitrogen oxides and 98% for particulate emissions. Fleet emissions have been reduced by 11%.

PSD has two buses that operate on propane and are used for in-town routes. PSD has set a goal of having 50% of the bus fleet fueled by compressed natural gas (CNG) within 10 years. PSD shares fueling stations with the City of Fort Collins and continues to pursue this alternative for CNG.

Routes for Child Nutrition food deliveries are streamlined with deliveries arranged geographically to save VMTs. In addition, Information Technology and Facility Services technicians are assigned to schools based on geographic location to reduce VMTs while traveling between sites.

As white fleet vehicles are replaced, the Transportation Department coordinates with Facility Services to "right size" vehicles based on individual department need – full sized trucks have been replaced with smaller, more fuel efficient vehicles. Ongoing opportunities with white fleet vehicle selection include alternative fuel sources compatible with snow plow use and frequent mountain travel.

Safe Routes to School and other District Initiatives

PSD works closely with the City of Fort Collins on the Safe Routes to School program. During the 2014-2015 school year, over 20% of district students took part in educational activities, including bike rodeos, biking field trips, and bike safety education. In addition, 1,622 third grade students (78%)

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received helmet safety instruction through the Safe Kids Larimer County Strap & Snap Program. Every PSD school receives training from Safe Routes to School on a three-year cycle. Grants received during the 2014-2015 school year were used for sidewalk improvements at O'Dea Elementary.

Through a grant from Safe Routes to School, 11 bike racks, a bicycle aid station, and two skateboard racks were installed at Lesher Middle School. Each high school received a bike repair station in an effort to encourage students to use alternative transportation. Seven additional bike repair stations for middle schools will be purchased in 2015 through a Kaiser Permanente grant.

Each October, Lesher Middle School teams up with nearby Laurel Elementary during International Walk to School Day. Morning bus routes drop off the elementary students at Lesher, and Lesher students and staff mentor students on safety as they walk from Lesher to Laurel.

District schools participate in the annual National Bike to School Day each May and Webber Middle School, in conjunction with the City of Fort Collins, hosts an annual winter Bike to School Day.

Olander Elementary fourth grade students have an annual bike field trip. 85 students, staff, and volunteers bike from Olander to recreational areas while learning about bike safety and bike etiquette.

Johnson Elementary established a "walking school bus" where students gather at two points and, with the supervision of parent volunteers, walk or bike to school together. This program reduces VMTs and the number of cars at the school during drop off and pick up times.

In conjunction with Safe Routes to Schools, PSD maintains a mobile bike fleet. The fleet, which consists of 20 bikes housed at Lincoln Middle School and 25 bikes housed at Bauder Elementary, are delivered to schools/events across the district to promote bike safety and health and wellness.

Pillar II: Improved Health and Wellness

Element IIA: An integrated school environmental health program

PSD uses a coordinated approach to promote healthy schools through a culture of wellness that is a part of the total learning environment. To support this mission, PSD adopted district policy ADF – Student and Employee Wellness in 2006, created a Wellness Department in 2012, formed the Wellness Advisory Council for Schools, the Employee Wellness Advisory Council, and integrated health and wellness into its sustainable foundation. PSD is a Certified Health Links Healthy Business Leader, a program recognizing businesses for meeting or exceeding health and safety standards; Certified Leader is the highest award. PSD has programs and staff to address the entire continuum of mental health, from developing healthy habits to responding to threats of student self-harm to supporting well-being.

Hazardous Waste

PSD complies with federal, state, and local regulations for hazardous and non-hazardous waste disposal. Utilities & Resource Management coordinates the safe disposal of hazardous waste, including chemicals, paints, fluorescent light bulbs, batteries, and medical sharps.

Utilities & Resource Management maintains a central database, building management plans, and floor plans for asbestos building materials following Asbestos Hazard Emergency Response Act (AHERA) compliance, as well as a database, building management plans, and floor plans for radon and lead paint. All PSD buildings were tested for radon in 1991, and new or renovated buildings are tested within 19 months of completion. Since 2013, six schools have been tested for radon following major renovation projects. Mercury-containing products are prohibited in PSD facilities and mercury-containing rubber floors have been replaced.

Indoor Air Quality (IAQ)

The Utilities & Resource Management department investigates all indoor air quality (IAQ) concerns

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in accordance with departmental procedures developed in January 2015, which strive to prevent illness, injury, and adverse health symptoms; make recommendations for improvement; and maintain indoor air quality within acceptable levels according to industry standards. When an IAQ concern is reported, Utilities & Resource Management initiates corrective action modeled after the Environmental Protection Agency's "Tools for Schools".

In-house monitoring is conducted for carbon dioxide and carbon monoxide. In accordance with Colorado law, PSD facilities are tobacco and smoke-free. To alleviate asthma triggers, PSD monitors the use of fragrances and air fresheners and has begun replacing carpet in high traffic areas with polished concrete in order to decrease particulate matter. If needed, PSD has the capability to monitor for oxygen, hydrogen sulfide, methane (LEL), and relative humidity.

After the Poudre River flooded in 2013, PSD investigated affected schools – Cache La Poudre Elementary and Middle School – and obtained third party sampling for mold. Renovations were completed to assure a safe and healthy working environment for students and staff.

Integrated Pest Management (IPM)

PSD is a member of the Colorado Coalition for School Integrated Pest Management (IPM) Program, a collaborative effort between the Environmental Protection Agency, Colorado Department of Agriculture, Colorado Department of Health and Environment, Colorado Department of Education, Colorado State University, and Colorado school districts.

PSD employs five functions within its written IPM program: inspection, sanitation, exclusion, coordination of Outdoor Services and Athletics Services, and training. Through each function, strategies are outlined to deal with pests in an environmentally safe manner. PSD contracts pest control services on an as-needed basis through a local vendor required to adhere to IPM practices. Herbicides are only used on sidewalks, parking lots, fence lines, and around trees to mitigate weeds. PSD utilizes TruGreen pesticide and herbicide products, which are applied safely by licensed applicators according to federal, state, and local regulations. Herbicide and pesticide products used do not contain carcinogens as defined by the Environmental Protection Agency, do not contain known skin sensitizers, and do not leach into the groundwater. To reduce the need for pesticides, PSD employs strategies including proper irrigation scheduling, top dressing, aerating, and organic fertilizers to promote growth and provide good root zones for grasses.

Student and Staff Safety

PSD works closely with the City of Fort Collins Safe routes to School program to provide bicycle safety instruction to students. During the 2014-15 school year, 6,544 students (22%) took part in bicycle education. At high schools, students receive education on the dangers of texting and driving, as well as the dangers of driving while impaired. PSD has installed "No Cell Phone Zone" signs at school drop off and pick up areas.

In accordance with PSD's Chemical Hygiene Plan, teachers in science and art departments receive annual training on the safe management, use, and disposal of chemicals, as well as procedures to reduce the hazard type and quantity of chemicals ordered.

In 2015, PSD received a grant to certify staff to teach CPR and AED to students and staff. Since receiving the grant, staff and students at each of PSD's comprehensive high schools have received CPR and AED training. Instructors also offer CPR and AED classes to the community.

School Resource Officers (SROs) are located at each comprehensive high and middle school to help provide a safe learning environment and help reduce school violence. SROs provide instruction on violence prevention and drug awareness and work with students, parents, and staff regarding public safety programs, community programs, peer support and mental health support.

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Element IIB: High standards of health, wellness and outdoor time

Child Nutrition

The Child Nutrition department oversees 45 kitchens preparing 2.2 million high quality meals annually, including breakfast and lunch. School meals are well-balanced and healthy in accordance with federal nutrition standards and every school lunch meets the U.S. Department of Agriculture's (USDA) My Plate guidelines. All district schools participate in USDA nutrition programs, such as the National School Lunch Program, School Breakfast Program, and Early Childhood Snack Program. Every school has a salad bar and students are provided with gluten free and vegetarian options. Nutrition, ingredient, and allergen information on every menu item is readily available in school kitchens, on the department website, and published to a cell phone app accessible by students, staff, parents, and the community.

Farm to School and Eat Local Programs

PSD implemented a Farm to School program in 2011. Over 180,000 pounds of produce comes from 22 local organic farms and 20% of all food purchased is made, grown, or produced in Colorado. Students learn about local farms through site tours, video segments hosted by students, activity packets, and directly from local farmers. The Child Nutrition program is active in a local food cluster which has a goal of increasing the quantity and percentage of items grown and purchased locally. Child Nutrition hosts an annual Farm to School Expo where students, parents, staff, and community members can sample menu items and visit booths run by local farmers and vendors.

School Gardens

14 PSD schools (28%) have active school gardens and produce grown in the gardens is incorporated into school meals and offered on the salad bar. Garden produce is also used for monthly taste-testing sessions at elementary schools during which students are educated on healthy foods and the nutritional benefits of the selected fruit or vegetable. Since 2013, five gardens have been constructed through grants from The Kitchen Community – Bauder Elementary, Dunn Elementary, Putnam Elementary, Rice Elementary, and Riffenburgh Elementary – and these gardens are used as experiential classrooms. The gardens are used as teaching tools, integrating aspects of the growing cycle into science lessons.

Physical Education and Student Wellness Programs

PSD complies with the Colorado House Bill 11-1069 for physical education (PE), providing PE instruction to all K-12 students. Elementary students receive 145 minutes of PE and physical activity per week, middle school students average 400 minutes per week, and high school students are required to have 15 credit hours of PE. Elementary schools offer before or after school running clubs.

Secondary schools offer comprehensive athletic programs - middle schools offer 10 sports while high schools offer 17 sports under the Colorado High School Activities Association (CHSAA). In association with Special Olympics' Project Unify, PSD offers a Unified Athletics program for special needs students and hosts an annual regional Special Olympics event at Fossil Ridge High School.

In addition to district-wide comprehensive K-12 physical education programs, the Wellness Department provides schools with ideas for activity breaks and "brain breaks" which provide quick activity bursts that stimulate the body and mind throughout the day.

PSD implements wellness strategies in schools using the Whole School, Whole Community, Whole Child (WSCC) model. This model is the recommended best practice for school wellness recommended by the Centers for Disease Control and the Association for Supervision and Curriculum Development.

PSD participates in the University of Colorado Health's Healthy Kids Club Schools on the Move

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5210 Challenge1, an annual program where students and staff track activity minutes and healthy habits. Irish Elementary, Lopez Elementary, Tavelli Elementary, and Werner Elementary were all finalists in the 2015 Challenge.

A PE teacher at Traut Elementary started an "Academics in Action" program to engage students who are kinesthetic learners. The program combines PSD's learning goals with physical skills, applying content and knowledge to a physical game or activity format.

Centennial High School maintains a school-based health clinic, offering physicals and other health services to low-income students.

Outdoor Time

On average, 50-60% of PE takes place outdoors, dependent on weather conditions. To incorporate physical activity into the learning environment, all students are provided with a variety of outdoor educational activities: elementary students participate "The Walking Classroom" program in which students take 20 minute walks while listening to a podcast on topics focused on science, social studies, and language arts; middle school students engage in Global Explorers field trips and river watch activities; and high school teachers incorporate the outdoors into lessons whenever possible, including hands-on experiential field trips and outdoor "brain breaks".

Element IIC: Coordinated School Health, Mental Health, School Climate, and Safety

Mental Health

Mental health services in schools are essential to addressing barriers to learning and are inseparable from PSD's instructional mission. School-based and school-linked programs provide early intervention, crisis intervention and prevention, treatment, and the promotion of positive social and emotional development. PSD's mental health program assists with crisis response services by providing recovery support for students and staff, assists students with alcohol, tobacco, and drug prevention, and collaborates with the Security Department to develop crisis management plans and site assessments for physical safety.

PSD offers Employee Assistance Services (EAS) free of charge to all employees and dependents. EAS assists with work-life balance, work relationships, communication strategies, job-related stress, marital and family concerns, loss and grief, depression, and 24-hour crisis assistance.

More than 400 parents and community members participated in an annual Mental Health Education Night during which mental health professionals covered topics including bullying, marijuana use, suicide, self-harm, and eating disorders.

PSD is training all school staff trained in QPR, a suicide prevention program that equips people with the skills to recognize warning signs of suicide and offer help to someone who feels suicidal.

Employee Integrated Health Management System

PSD's Integrated Health Management System (IHMS) was launched in 2013 to support employees by combining all aspects of health and wellness into a cohesive, connected approach. The IMHS has four key components:

• PSD partnered with University of Colorado Health, Associates in Family Medicine, and Miramont Lifestyle Fitness to provide employees/dependents with a free employee health clinic.

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¹ Additional information can be found at https://www.uchealth.org/Pages/Services/Community-Health/Healthy-Kids/5210-School-Challenge.aspx



- Comprehensive wellness programming is offered to all employees, including biometric screenings, health assessments, fitness assessments and classes, flu shots, and discounted memberships to local fitness centers.
- PSD employees and dependents can access Employee Assistance Services (EAS) to address jobrelated stress, personal and family issues, chemical dependency, depression, and anxiety.
- A Lifestyle Health Management Program offers assistance to employees or dependents at risk for a chronic condition. Support tools are provided to improve nutrition, fitness, and overall health.

Pillar III: Effective Environmental and Sustainability Education

Element IIIA: Interdisciplinary learning about key relationships between dynamic environmental, energy and human systems

PSD's District Ends, which define the vision and direction of PSD and provide guidance in curriculum development and program planning, were adopted by the Board of Education in 2006 and updated in 2014 to focus on providing students with coursework, hands-on opportunities, and experiences that ensure academic success while reflecting the expectations of a changing world. The Ends include demonstrating college and workforce readiness and exhibiting 21st century skills such as global and cultural awareness, creativity and innovation, civic responsibility, and personal responsibility; and providing students with opportunities to excel in their personal areas of interest and have opportunities for authentic experiences.

Sustainability concepts are embedded in the curriculum across all grade levels. For example, science standards for all students include "experience the richness and excitement of observing and understanding the natural world" and social studies focuses on "understanding of how humans interact with each other and with the environment over time".

Curriculum connects state standards to important community sustainability issues regarding air quality, alternative energy, and erosion through project based inquiry. Each school implements standards and curriculum individually based on their school population and student interests. For example, Kinard Middle School uses their school building as a learning tool, covering the science behind their geothermal HVAC system, computer automated energy features, and architectural features that maximize natural daylight. Kinard works with Colorado State University to provide environmental and climate change education as part of NASA and NSF grants.

In addition to student engagement in sustainability, PSD staff integrate sustainability into their work and professional development. Numerous professional development classes relating to sustainable practices are offered to staff, such as chemical safety, storage, and disposal trainings and classes on how to integrate new technology devices in the classroom, including efficient management, care, and sustainability of the devices. Every summer, PSD hosts the Summer Institute during the first two weeks of summer break. Teachers are provided with training opportunities in a variety of topics, including watershed science and tours of local sustainable business to provide real life connections to career pathways. Approximately 500 teachers (50%) attend the Summer Institute. Since 2008, Preston Middle School has hosted an annual international STEM conference for teachers to enhance their professional development in all areas of the STEM curriculum.

The City of Fort Collins and PSD partner on several initiatives to integrate sustainability and the environment into the classroom. During the 2014-2015 school year, the City of Fort Collins Utilities Department worked with 36 schools to provide hands-on, curriculum-based classes, programs, and events for students, including:

• Energy labs tailored to all grade levels provide lessons on different forms of energy through the Energy Rules! Program.

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- The WaterSHED program provides field trips to the Poudre River tailored to each grade level and covers topics including stream ecology, water chemistry, biological adaptation, and ecological diversity.
- Dr. WaterWISE visits elementary school classrooms to teach students behaviors and ways their families can conserve water at home. This program is featured at 8 to 10 schools each year and lessons are connected to science, math, and social studies standards.
- Elementary students become "Volt Busters" through a program in which students are tasked with tracking their energy-saving actions, both at school and at home, and receive extension activities during class that demonstrate how energy is created and used. The top "Volt Busters" receive awards through the City of Fort Collins.

Element IIIB: Use of environment and sustainability to develop STEM content, knowledge and thinking skills

To meet the District Ends, PSD integrates courses into coherent STEM career pathway sequences. Each comprehensive high school has developed a unique STEM or STEAM pathway: Bioscience Pathway (Fort Collins HS), STEM Academy Pathway (Fossil Ridge HS), Creative Arts and Design Pathway (Rocky Mountain HS), and Agriculture and Natural Resources Pathway (Poudre HS). As a part of these pathways, high school students are required to take 30 credit hours of math, 30 credit hours of science, and additional credit hours of pathway-specific content, and pathways culminate in a capstone project or internship.

In preparation for these pathways, 100% of elementary students receive instruction in math, science, and technology. At the middle school level, 100% of students are provided math, science, and technology courses of increasing complexity to better prepare them for a pathway. Secondary students are also offered advanced placement and IB courses. Advanced environmental classes – Advanced Placement Environmental Science and IB Environmental Systems and Societies – comprise approximately 10% of eligible graduates each year.

In addition to STEM pathways, high school students are offered a variety of courses that place an emphasis on environment and sustainability content, such as Biology, Earth Systems Science, Geospace, Environmental Science, Leadership by Design, Agricultural Sciences, and Food and Natural Resources. Career and Technical Education courses include content areas in engineering exploration, engineering drafting, and clean energy manufacturing.

In 2012, PSD adopted a 1:1 technology initiative in which every PSD student received a laptop. With this initiative, technology has been integrated as a key component in all classes.

Element IIIC: Development and application of civic engagement, knowledge and skills

Civic engagement and sustainability are woven into classroom curriculum, extracurricular activities, and performance evaluations. Beginning in kindergarten, students engage in learning activities emphasizing participation in making decisions using democratic traditions; civic participation taking place in multiple groups; analyzing and practicing rights, roles, and responsibilities of citizens; and describing how humans are dependents on the diversity of resources. PSD teachers typically approach these concepts through interdisciplinary inquiry learning in which student questions and interest guide the class. As students advance, the ideas of civic engagement and sustainability spiral throughout the curriculum leading to a variety of experiences. Some examples of these experiences are:

• Students from Poudre High School's Link Club and Ambassadors Club launched a "beautify the school" campaign. During the first Saturday of each month, over 20 students work around the school performing tasks, such as picking up trash, cleaning the bleachers, and emptying

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- recycling, aimed at enhancing the school environment. The program aims to instill a sense of ownership in their school and an appreciation for the work it takes to keep their school clean.
- 19 students from Webber Middle School's Sustainability Club, City of Fort employees, and volunteers, helped prepare a local Community Support Agriculture (CSA) farm for winter by pulling up drip irrigation lines and plants, and deconstructing fences. This project helped raise visibility of CSAs within city limits.
- High school students participate in Colorado State University's Get Wet Project which investigates the health of the local watershed.
- Rocky Mountain High School initiated a "My Teacher Cares, I Care; Therefore, I Help My Friends Care" system in which leaders from the student body and staff work to get buy-in with students on recycling efforts, turning off lights, and engaging in other sustainable practices. Once students become involved, they encourage peers to do the same.
- Lesher Middle School partnered with Global Explorers to send 20 students on a service learning trip to the desert southwest. Students learned about local flora and fauna, explored the San Juan River, and engaged in a service learning project on a Navajo Indian reservation.
- Schools offer Ecology Clubs, which participate in citizen scientist projects examining the effects of recent forest fires and floods in northern Colorado.
- Kinard CARES (Community Action Results Environment Service) students developed, designed, built, and implemented a highly successful sustainability program, encouraging students to bike, walk, or carpool to school and inspiring students to take part in nutrition and fitness programs. Kinard CARES students also participate in an environmental leadership program in Catalina, California where students participate in ocean kayaking, kelp forest snorkeling, tide pool discoveries, terrestrial hikes, garden and organic farming.
- Peer counselor programs are in use at each comprehensive high school where students lead teambuilding activities and educate their classmates on mental health resources.
- Character education programs in elementary and middle schools include: The Leader in Me, The Great Kindness Challenge, Peacekeeper Circles, and No Place for Hate.
- PSD has led many tours of Kinard MS, Bethke Elementary, and Fossil Ridge HS highlighting the green features of these schools and expounding on the learning environments these schools provide. Students and staff from Colorado State University also benefit from the teaching aspects of these schools.
- The Give Next class sponsored by the Bohemian Foundation gives students the opportunity to experience philanthropic giving. Community sponsors provide \$5,000 to award to local nonprofits and students take field trips to nonprofits, conduct interviews, and gather research to decide how to award the funds.
- Poudre Community Academy students serve the community every Wednesday by volunteering in elementary schools, at the CSU forestry department, and serving lunch at the Catholic Charities kitchen.

Outdoor Learning Experiences

Opportunities for outdoor activities are offered at all grade levels. Examples include:

- Fifth grade students participate in Ecology ("Eco") Week excursions to the mountains every fall, where students engage in hands-on ecological lessons, guided nature hikes, and stream ecology.
- Eighth grade students at Polaris Expeditionary Learning School participate in an annual river walk. Students walk from their school to the Poudre River and carry water back to the building, relating the walk to how far children in Africa have to walk to find clean drinking water.

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- Cache La Poudre MS have participated in River Week, a school tradition during which the nearby Poudre River is used for hands-on experiments to test water velocity, and students explore aspects of the local resource that is so integral to life in their surrounding community.
- The City of Fort Collins hosts a Children's Water Festival each spring. Over 1,700 third grade students (81%) from 22 (71%) schools attend the event, which features activities on various water topics including aquatic wildlife, water chemistry, and water conservation.
- At Fossil Ridge HS, special needs students grow vegetables and work with local farmer's markets to sell the vegetables. Students develop a business plan for selling vegetables and present the plan to local businesses to help sponsor the project.
- The Advanced Career Education program at Rocky Mountain HS purchased a solar-powered geo-dome for students to grow fruits and vegetables, connecting the experience to science and business standards. Students then use this experience to achieve an internship in a related field.
- The Centennial HS equine class teaches students how to care for and handle horses, work with vets on health care for horses, and interact with professionals in the horse industry.
- Poudre HS students build homes for Habitat with Humanity using math, science and technology skills to benefit members of the community.

Community Partners

PSD partners with many organizations to provide sustainable programs, initiatives, and education. Partners include:

- The Strategic Sustainability Team (S2T) consisting of representatives from the City of Fort Collins, Larimer County, PSD, the Institute for Built Environment, and Colorado State University meets every other month to discuss potential joint projects, local environmental and sustainable initiatives, and review emerging technologies in sustainability.
- PSD is an active participant in the City of Fort Collins Climate Action Plan Strategic Initiative Team, which develops new strategic initiatives, greenhouse gas emissions goals, and tracking metrics
- Gallegos Sanitation, Inc. (GSI) provides trash, recycling and composting services as well as classroom education and audits to optimize diversion rates and waste reduction.
- PSD works with the University of Colorado Health's Healthy Kids Club, which promotes health and wellness to students in Northern Colorado elementary schools.

Additional Supporting Evidence

Poudre School District Awards, Recognitions, and Grants Received

- Energy Star Awards (2000-2003, 2005-2015)
- Environmental Achievement Award (2001) U.S. EPA Awarded for superior leadership, commitment to energy conservation, environmental performance, and responsible use of tax dollars.
- **Recognition Award (2001) -** Colorado Renewable Energy Society Awarded in recognition of development of sustainable schools.
- Waste Saver Award (2001) North Front Range Solid Waste Action Group
- Design Merit Award (2002) AIA Colorado Awarded for design excellence for Zach ES
- Recognition Award (2002) Colorado Renewable Energy Society Awarded to the Operations Center

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- Sustainable Design Award (2003) American Society of Interior Designers Awarded to Zach Elementary School
- Colorado Prevention Pollution Champion (2004) State of Colorado
- Designed to Earn (2005) Energy Star Kinard Middle School for superior design intent
- LEED-NC v2 Silver Certification (2005) US Green Building Council Awarded to Fossil Ridge High School
- Merit Award (2005) American Council of Engineering Companies of Colorado Awarded to Fossil Ridge High School
- Monarch Award (2005) Council of Educational Facility Planners International Awarded to Fossil Ridge High School
- Colorado Energy Champion Award (2006) State of Colorado Office of Energy Management and Conservation Awarded to Kinard Middle School
- Designed to Earn (2006) Energy Star Awarded to Rice Elementary for superior design intent
- Partner for a Decade Award (2006) Northern Colorado Clean Cities Awarded to Transportation Services
- **Tobacco Prevention Grant (2006)** Colorado Department of Health and Environment \$300,000 awarded for tobacco prevention campaigns
- Clean School Bus America Grant (2007) Environmental Protection Agency \$253,875 awarded to retrofit school buses with emission-control devices
- Designed to Earn (2007) Energy Star Bethke Elementary School for superior design intent
- More Kids in the Woods Grant (2007) U.S. Forest Service \$165,000 awarded for environmental education during Ecology ("Eco") Week
- ASHRAE Technology Award (2008) Awarded to Fossil Ridge High School
- **LEED for Schools Gold Certification** (2008) U.S. Green Building Council Awarded to Bethke Elementary School (first school in the nation to receive this designation)
- Living up to Energy Promises (2008) Building Operating Management September issue Highlighted PSD's Energy Star participation
- Platinum Partner Member (2008-2015) City of Fort Collins ClimateWise program
- Silver Partner Member (2008) State of Colorado Environmental Leadership Program
- Gold Partner Member (2009-2015) State of Colorado Environmental Leadership Program
- **Physical Education Road Map to Excellence Grant (2011)** Colorado Health Foundation \$882,127 awarded to implement P.E. curriculum standards and provide new P.E. equipment
- Red Apple Recycling Grant (2011) \$1,000 awarded to Kinard Middle School
- Bronze Partner Member (2012-2015) State of Colorado Environmental Leadership Program
 Awarded to Kinard Middle School
- Green Ribbon School Award (2012) U.S. Department of Education Wellington Middle School
- Environmental Stewardship Award (2013) Tandus Awarded to Beattie and McGraw Elementary Schools for carpet recycling efforts
- Green Ribbon School Award (2013) U.S. Department of Education Kinard Middle School

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- **Healthy Schools Grant (2013)** Rocky Mountain Center for Health Promotion and the Colorado Health Foundation \$173,720 awarded to the Wellness Department
- **School Health Grant (2013)** Colorado Department of Education \$119,734 awarded for comprehensive school health
- Green Ribbon School Award (2014) U.S. Department of Education Lesher Middle School
- Thriving Schools Grant (2014) Kaiser Permanente \$100,000 awarded to support physical education and student wellness
- Halo Award (2015) Health Links Colorado Awarded for being one of Colorado's healthiest places to work
- Healthy Business Leader (2015) Health Links Colorado

Poudre School District Photographs and Captions



Learning garden and outdoor classroom at Olander Elementary School



Bicycle giveaway during Lesher Middle School's annual Bike to School Week

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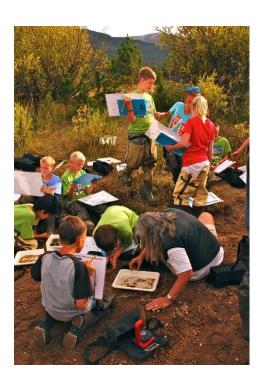




Student-run recycling and composting program at Kinard Middle School



Photovoltaic system at Bethke Elementary School



Students participate in River Week activities during science classes at Cache La Poudre Middle School

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