



## 2013-2014 District Nominee Presentation Form

### **PART I - ELIGIBILITY CERTIFICATION**

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#### **District's Certifications**

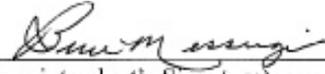
The signatures of the district superintendent (or equivalent) on the next page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

1. 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 and sustainability education.
2. 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.
3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district as a whole 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.
4. 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.
5. 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.
6. 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.

Name of Superintendent\* Dr. Bruce Messinger  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name\* Boulder Valley School District Tel. (720)561-5114  
(As it should appear on an award)

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

  
(Superintendent's Signature) Date 1/23/14

## **PART II – SUMMARY OF ACHIEVEMENTS**

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### **Instructions to District Superintendent**

Provide a concise and coherent "snapshot" that describes how your district is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your district worthy of the U.S. Department of Education Green Ribbon School District Sustainability Award.

## **PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE**

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### **Instructions to Nominating Authority**

The Nominating Authority must document the district's high achievement in each of the three ED-GRS Pillars and nine Elements. Please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

### **Nominating Authority's Certifications**

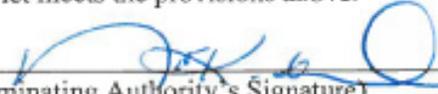
The signature by the Nominating Authority on this page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. 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 and sustainability education.
2. 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. Robert Hammond**  
(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 district meets the provisions above.

 \_\_\_\_\_ Date 1-30-14  
(Nominating Authority's Signature)

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 [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509  
Expiration Date: February 28, 2015

### **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](mailto: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.

# Colorado Green Ribbon Schools – District Application

## 2013-2014

### PART IA: DISTRICT CONTACT INFORMATION

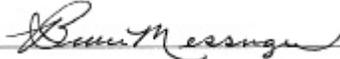
**District Name:** Boulder Valley School District

**Street Address:** 6500 Arapahoe Rd, Boulder, CO 80303

**Website:** [www.bvsd.org](http://www.bvsd.org) and [www.bvsd.org/green](http://www.bvsd.org/green) **Facebook page:** facebook.com/BoulderValleySchoolDistrict

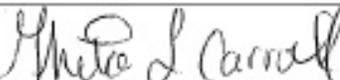
**Superintendent Name:** Bruce K. Messinger

**Superintendent Email Address:** superintendent@bvsd.org      **Phone Number:** 720-561-5114

**Superintendent Signature\*:** 

**Lead Applicant Name (if different):** Ghita Carroll

**Lead Applicant Email:** ghita.carroll@bvsd.org      **Phone Number:** 720-561-5181

**Lead Applicant Signature\*:** 

*\*By signing this application, Superintendent and/or Lead Applicant assure that the information provided is accurate to the extent possible.*

#### District Demographics

<b>Number of Schools at Each Level:</b> [30] Elementary (PK - 5 or 6) [5] K - 8 [9] Middle (6 - 8 or 9) [8] High (9 or 10 - 12) [4] 6-12 <sup>th</sup> grades [1] K-12th	<b>Other data you wish to collect:</b> 1,908,288 meals prepared annually by BVSD Food Services	<b>How would you describe your district?</b> <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban <input type="checkbox"/> Rural	<b>Is your district in one of the largest 50 districts in the nation?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Total Enrolled:</b> _30,150_____
<b>Does your district serve 40% or more students from disadvantaged households?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>% receiving FRPL</b> _18.8%_____ <b>% limited English proficient</b> _8.4%_____ <b>Other measures</b> _____		<b>Graduation rate:</b> 89.7%_____ <b>Attendance rate:</b> 94.2%____
<b>Is your district participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Program(s) and level(s) achieved:
<b>Has your district, staff or student body received any awards for facilities, health or environment?</b>			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Award(s) and year(s):

## Summary

*“The Boulder Valley School District is committed to becoming a leader in environmental sustainability by creating healthy learning environments, while providing students with the skills to address the systemic challenges faced by the world in this new century.” –Boulder Valley School District Sustainability Vision Statement (created in 2009)*

The Boulder Valley School District (“BVSD”) is building on 20-plus years of environmental stewardship and embracing environmental sustainability at a new level. The district hired a Sustainability Coordinator in the summer of 2008 and created a Sustainability Management System (“SMS”) in the 2008-09 school year. In doing this, BVSD was able to coordinate existing efforts, and to define goals and visions around sustainability at a district level for the first time. In 2010 the Board of Education updated policy ECF, to further support sustainability work in the district, and specifically the SMS. The policy language includes the commitment to “educate students about lifestyles and technologies that limit our negative impact on the environment and use natural resources in a manner that maintains quality of life and reduces consumption to a sustainable level.” It further states that the district “establish and operate healthful, safe and productive learning environments while practicing environmental and fiscal responsibility.” The policy supports the work of the SMS as a roadmap for this work, and further directs the superintendent to monitor, evaluate and report on progress. The policy with the following statement: “The Board of Education strongly encourages each district employee and student to work toward environmental sustainability and resource conservation through the implementation of the SMS.”

In 2012 the District completed a Sustainability Progress Report which shares the district’s most significant accomplishments in sustainability practices since implementing the SMS in 2009. This report also provides measurement of the district’s progress toward meeting the five-year goals defined in the SMS, thus acting as a midway checkpoint of the district’s progress. Finally, the report reaffirmed the district’s long-term commitment to sustainability.

BVSD has made great strides in the past few years to incorporate sustainability into operations and education. We are proud of and excited about how district staff and students have embraced sustainability as an organizational value. We have met many of our sustainability goals ahead of schedule, and we continue to work hard to meet and exceed all of the goals set forth in our SMS. The achievements and lessons learned from our accomplishments to date will inform our path moving forward and the development of new goals as we progress toward our long-term sustainability mission. Some specific highlights of our work include a 34% decrease in water use since FY2008 and an 18% decline in energy use since FY2010. The District has expanded renewable energy technologies from five schools and facilities to twenty-eight (and has offset more than 3,530 metric tonnes of carbon). We have also completely revamped our food services program to highlight and support healthier choices and local and organic foods. We have substantially increased our health offerings and services for students and staff, and have seen a decline in student incident reports. Half of our schools are now composting school-wide and all schools recycle paper and commingled containers. The District also has many efforts in place to collect and properly dispose of hard to recycle materials. We hope it is evident throughout this application how we connect the learning opportunity into all of our sustainability efforts, as it is through education that this work has even greater value. There was student involvement in creating this application.

## **Pillar 1: Reduced Environmental Impact and Costs**

### **Element 1A: Improved energy conservation/energy-efficient buildings**

The Boulder Valley School District (“BVSD”) is striving toward net zero energy buildings and an 80% reduction in greenhouse gasses (GHGs), or climate neutrality by 2050 (as per BVSD’s Sustainability Management System (“SMS” 2009) and Sustainable Energy Plan (2013)). Specific five year goals relating to energy (as defined in the SMS) include a five percent improvement in energy operating efficiency per square foot, a 10% reduction in GHGs below the baseline (FY2008), and a minimum of 100 kW increase in renewables.

#### Energy Conservation

**BVSD has made great strides to reduce energy consumption, as evidenced by an 18% decline in energy use since FY2010!** Our baseline for energy use was set when we developed the SMS for FY2008. However, because we were in the middle of a large capital construction effort, and increasing air conditioning and information technology capacity, the district saw an increase in energy use per square foot for two years, which then started to decline. Energy Use Intensity (EUI, which is defined as kBtu/sf/year) has dropped by 4 kBtu/sf district-wide from the baseline year (69 kBtu/sf in FY2008 to 65 kBtu/sf in FY2013) and the five-year SMS five% reduction target has been exceeded. Some of the many strategies BVSD has implemented to achieve energy reductions include:

- Purchased and is using Utility Manager (UM), which gives the district easy access to energy and water data by school, and the ability to easily provide and analyze the data, respond to issues and easily benchmark using Energy Star Portfolio Manager. **BVSD has 10 schools that are Energy Star qualified (see attachments for list and scores.)**
- Several schools also use EcoSchools as a framework for sustainability and Project Learning Tree resources. Pioneer Elementary has achieved Bronze and is working toward Silver in the EcoSchools program.
- Partnered with the Green Schools Alliance’s Green Cup Challenge for our Energy Challenge. This year there are 21 schools competing and the district administration building.
- Installing energy dashboards for all BVSD schools. These dashboards will provide real-time data in a user friendly format and will be valuable in energy competitions and as a demand reduction strategy. They are also highly educational.
- Upgraded lighting district-wide to more efficient fixtures with occupancy sensors.
- Implemented computer management software to power computers down when not in use and during non-operating hours, virtualized most of the District’s servers, and following an end-of-life policy to shut off unused servers.
- Working with school ‘green teams’ made up of students, staff and parents on competitions to reduce energy. (Please see Pillar 3 for more information).
- Audited many buildings throughout the district with a focus on personal appliances and building systems (Audits completed with Xcel Energy, State Energy Office and internal audits with student involvement.) Completed select re-commissioning.
- Implemented vacation shut down policies for all major breaks.
- Increased preventative maintenance work as part of heat mitigation efforts, e.g. coils in HVAC systems were cleaned to provide better comfort and efficiency.
- Installed Variable Frequency Drives on appropriate motors throughout the district, increased boiler optimization by using air-fuel ratio controls in select locations, installed boiler and hot water piping insulation at select locations and installed destratification fans in gyms or spaces with ceilings above 15 feet.
- Increased district-wide and community wide communications around best practices for saving energy and created and distributed “When not in use turn off the juice” light switch stickers.
- Reduced the number of vending machines in each school and switched to a provider that offers healthier food options in a more energy efficient vending machine.
- Established budget for Sustainability and Energy projects, funded by rebates.

This past summer, staff worked to create BVSD's first Sustainable Energy Plan. This plan sets a new short-term goal of 20% below baseline by FY 2019, with the long-term goal of zero-net energy capable buildings by 2050. This plan also provides detail on the methodology for achieving the new goals and specific strategies, including potential funding, partners and training opportunities

### Renewable Energy

Prior to 2008, BVSD installed 22kW of renewable energy. By 2011, BVSD had 123.4 kW of solar photovoltaic ("PV") systems installed on 14 schools. BVSD owns these systems, which were funded through the Renew Our Schools Program, grants and the 2006 Bond. This was a 460 percent increase in solar electricity generated by the district, compared to 2008. In June 2011, BVSD entered into a Power Purchase Agreement ("PPA") with Solar City to install large scale systems (roughly 100kW) on 14 additional schools, for an additional 1.4 MW of solar power. Schools with these large PV systems have 15-30% of the school's electricity needs met by solar. Total electricity for BVSD met by renewables is roughly 8%. **PV on BVSD schools has offset more than 3,530 metric tonnes of carbon!** All of the schools in the PPA have associated websites showing live data from the solar panels, and real time energy consumption. These schools also received and are using materials provided by the National Energy Education Development Project and Solar City, to incorporate lessons about renewable energy and efficiency into curriculum.

In 2011, BVSD installed a wind turbine at Nederland Middle/Senior. This project was grant funded. BVSD has two schools with geothermal heating and cooling systems. The system at Summit Middle School serves roughly 30 percent of the school, and the system at Casey Middle School provides 90 percent of the school's heating and cooling needs. BVSD has installed tubular solar in many schools, bringing in natural light to interior spaces. We are piloting a donated Sundolier™ active daylighting system at a Southern Hills Middle School.

### Buildings

In conjunction with the creation of the SMS in 2009, BVSD created green building guiding principles for all construction projects, and updated technical specifications to include green elements and design and the green building principles. The District passed a Bond in 2006, and we made an effort to implement the guiding principles in construction projects to the extent feasible within the identified work and available funds set forth for each project in the Educational Facilities Master Plan.<sup>1</sup>

The 2006 Bond and a partnership with the City of Boulder funded the reconstruction of Casey Middle School, which achieved Leadership in Energy and Environmental Design (LEED) Platinum status from the US Green Building Council and GBCI. For more information regarding Casey, including building performance data, go to <http://casey.bvsd. greentouchscreen.com/>. The Touchscreen and green features of the school have been incorporated into the curriculum at the school.

The 2006 Bond also funded the reconstruction of Columbine Elementary School, which was built to LEED Gold standards. Horizons K-8 received a BEST grant, which requires new construction to meet LEED Standards. The District has led many tours of Casey Middle School and Columbine Elementary School, highlighting the green features of these projects and expounding on the living laboratories these schools provide. Audiences have ranged from BVSD student groups and teachers, classes from the University of Colorado Boulder and Naropa, students and staff from other school districts, and the Environmental Policy Advisor for President Obama, Chair Sutley, US Representative Jared Polis and staff.

Other building highlights include the establishment of environmental standards for portable classrooms used in the bond program, most new construction featured windows and skylights to provide natural daylight which reduces energy consumption and enhances learning environments, and we have worked with schools to place signs highlighting the green features of each project. BVSD received \$252,194.50 from Xcel Energy rebates for efficiency measures put in place during the Bond. The District is currently in the process of assessing

<sup>1</sup> Visit [www.bvsd.org/green/ Documents/2012BondFinalReport.pdf](http://www.bvsd.org/green/Documents/2012BondFinalReport.pdf) to find the final report of the bond projects, including sustainability features that were considered and implemented in each project.

schools for future capital improvement needs, and sustainability and energy conservation are key components of that assessment.

### **Element 1B: Improved Water Quality, Efficiency and Conservation**

Boulder Valley School District schools get water from public water systems, which test for contaminants on a regulatory prescribed schedule. Additionally BVSD Environmental Services has done considerable testing for lead in drinking water at the school drinking fountains. We identified fountains that had the potential for leaching trace amounts of lead into the water and had those fountains replaced. We monitor schools on a regular schedule.

BVSD installed a centrally controlled irrigation system with sustainability features including weather responsiveness which turns this system off when it is raining, indicators for leaks and an evapotranspiration feature. BVSD has some water efficient landscaping including synthetic fields at all high schools and one middle school, gardens at over half of BVSD schools, natural habitat and outdoor learning spaces at several schools, including Sombrero Marsh, where all BVSD 4<sup>th</sup> graders take a field trip to explore the marsh. (This is a Partnership with Thorne Nature Experience and the City of Boulder). BVSD has a few schools with bioswales, retention ponds, a green roof, and impermeable services to help with water quality and storm water management. We are actively looking to include these features at more schools. When we can, BVSD uses gray water (all Superior schools) and irrigation ditches (4 schools) for outdoor water use. BVSD has a district storm water program, which includes permits for the five largest high schools.

All new replacements for indoor water fixtures and devices are now low flow. District-wide roughly 80% of all fixtures are low flow. BVSD uses Utility Manager (UM) to track monthly water use by school, monitor usage and respond to anomalies. We are thrilled to report that we have decreased water use from 50 gallons/square foot in FY2008, to 33 gallons /square foot in FY 2013 district wide, which is a 34% decrease!

BVSD partners with the City of Boulder Water Department and the Keep it Clean Partnership to offer water quality and water conservation programming to students throughout the district. Many of our schools have outdoor learning spaces or outdoor classrooms.

### **Element 1C: Reduced waste production and improved recycling and composting programs**

#### Waste Reduction

BVSD contracts with local recycler Eco-Cycle for waste reduction programming and collection of recyclables in all schools. Eco-Cycle also supports the Green Star Program in a growing number of BVSD schools. Green Star schools are moving toward zero waste by implementing composting school-wide, increasing recycling efforts, hosting special events around waste reduction and implementing other waste reduction activities in the schools. **Currently 29 schools and two additional BVSD facilities are Green Star. There are 24 Elementary Schools, 4 Middle Schools and 1 High School participating.** Last year BVSD diverted 522,966 lbs. of recycling (combination of commingled containers and mixed paper & cardboard) from the landfill, and 225,849 lbs. of compost from the landfill. Staff are beginning to track waste data using Utility Manger. The District is diverting at least 24% of all waste from landfills district-wide (not including electronic waste that we collect and recycle separately). Green Star Schools have a much higher diversion rate (up to 60% diversion). Long term we have a vision of all of our sites practicing zero waste by composting and recycling, while also minimizing waste. We are also diverting waste by eliminating waste up front, such as a switch away from milk cartons (which used to be recycled) to bulk milk and reusable cups in all schools. Other significant waste reduction activities include:

- BVSD and Eco-Cycle partner with Red Apple to collect clothing items and shoes at several schools, and we partner with the Wireless Alliance to collect batteries, cell phones and toners at the schools. Schools receive some funding from these collections.
- All monitors and computers and other electronics are recycled with an e-steward recycling company.
- Most of the furniture removed from buildings during remodels was dismantled and the materials were reused within the school or community, or sent to appropriate recyclers.
- Food Services shifted to reusables (trays, silverware, plates and cups) at all schools. This has significantly reduced the amount of waste produced in the cafeterias.

- Food Services has eliminated Styrofoam from kitchens and the BVSD Warehouse has eliminated Styrofoam cups.
- Eco-Cycle and the City of Boulder have piloted a “Reusables Rule at Our School” program, educating students about the benefits of reusable water bottles. This program also provides funding for new water fountains with a water bottle filler and a counter showing how many disposable water bottles were avoided with each fill.
- BVSD’s Communication Office has significantly cut down on paper use by switching most of the District’s key publications to electronic format.
- We have compost, recycle and landfill waste stations in all three of our production kitchens and all of the grease cooked off from our beef is recycled into biofuel for regional farmers. The oil is picked up for free by Recycoil, who then turns it into bio-diesel.
- Eco-Cycle provided roughly 1000 presentations to BVSD schools last year, reaching thousands of staff and students. These included environmental education programming, trainings on zero waste and recycling best practices, and field trips.

### Green Cleaning Products

BVSD’s goal is to create a healthy, safe environment for all who enter the doors of every district school and facility. Born out of a growing concern involving the health risks and environmental effects of traditional cleaning chemicals, BVSD has begun using environmentally conscious cleaners within our school district. The District has been testing green products over the past several years, and our warehouse supplies schools with Green Seal Certified multi-surface cleaner, neutral cleaner and floor and surface disinfectant. The Food Services Department also changed to non-toxic cleaning products that meet green standards and has banned Clorox. Custodians and Food Services staffed are regularly trained on green cleaning products, procedures and best practices. All schools have MSDSs on site.

Last spring, we initiated a pilot program in collaboration with Staples Office Supply, who has developed a complete product line of environmentally friendly cleaning products. A few BVSD custodians recently started a pilot of these products within their buildings, and found that not only have the chemicals proven effective against grime but there are fewer complaints about fumes and negative health effects. These products are used to clean everything within our structures, from doorknobs and desk surfaces to drinking fountains and restroom surfaces. We plan to expand this program district-wide.

Additional benefits of the new Staples products include built-in efficiencies with new soap, paper towel and toilet paper dispensers. For example, we are now using coreless toilet paper rolls, which reduce waste. The new Staples products are delivered directly to the schools with other office supplies, reducing shipping miles and carbon emissions.

### Purchasing and Policy

Long-term, BVSD would like all purchases to follow best green practices (SMS 2009). The District has created sustainability criteria for BVSD’s formal procurement solicitations and added sustainability criteria to some Requests for Proposals released by the District. The District also created and distributed a Green Purchasing Guide for all staff with purchasing authority. To make purchases, staff must pass an exam, which includes green purchasing questions. The District encourages reuse of products with a website showcasing available surplus items in the Warehouse. Examples of green purchases include all new computers are E-PEAT and Energy Star certified, all paper purchased by the District is made with 30% post-consumer recycled content, and bathroom tissue, paper towels, paper napkins and facial tissues are certified as EcoLogo and Green Seal and have high-recycled content. Food Services has reduced vendor packaging by providing reusable containers to vendors to pack our product.

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

BVSD has a long term goal of reducing car trips and increasing the rates of walking, bicycling, busing (school bus and public transit), and carpooling to school. Furthermore, we aim to lower the emissions of bus fleet through the use of hybrid buses, alternative fuels, and efficient routing schedules (SMS 2009). Over the past few

years the number of students riding school buses has increased. Also, we have seen increased participation in two district-wide encouragement events: **International Walk to School Day** (33 schools participated in 2009 and 36 schools and 6,000 students in 2013) and **BVSD Bike to School Day** (3,233 students and staff registered in 2013)

Two programs are engaged to reduce car trips and sustain the use of alternative transportation. First, a reward program known as **BVSD Trip Tracker** created by our Transportation Department presently has about 2,000 students participating at 17 schools. *In the 2012-13 school year, Trip Tracker was responsible, according to parent surveys, for a reduction of 75,000 car trips to school.* Families keep track of trips, report them monthly by electronic survey, and receive in return Trip Tracker Dollar rewards. A companion piece is the **School Transportation Network Map and Directory** that supports families' ability to find neighbors to share trips to school in the form of group walking, cycling, bus buddies and carpools. Second, is the **BLAST cycling education** program that trains 4-7<sup>th</sup> grade students in skillful and safe cycling practices during physical education periods. A fleet of bicycles and helmets are transported to schools and loaned to students for the course. *To date, more than 3,000 students at 22 BVSD schools have received the training* which in essence is intended to foster healthy habits, encourage cycling as a form of transportation, and create life-long cyclists. More transportation highlights include:

- BVSD partnered with the City of Boulder on a \$68,000 two-year grant project to improve crosswalk safety and provide crossing guard training at 22 BVSD schools ending in July 2013.
- In partnership with Eco-Cycle, parents collected and diverted from landfill over 1,417 pounds of used shoes as part of the 2013 International Walk to School Day.
- Students and parents participated in filming of a State of Colorado (CDOT Safe Routes to School) crossing guard training video produced in 2012.
- Five schools have participated in Colorado's American Lung Association's CASEO program. All schools showed a reduction in emissions associated with vehicle idling at school. Students and parents assisted with data collection and incorporated results into science coursework.
- BVSD has specific goals to increase the number of hybrids and alternative fueled fleet vehicles and reducing overall fleet emissions in addition to an operating procedure that limits idling time of school buses and support vehicles to five minutes within a one hour period.
- Since 2007, all vehicles have been using five percent biodiesel.
- In 2010, BVSD implemented the Schoolpool program as part of GObyBus grant project at six middle schools and experimented with various alternative transportation methods to reduce VMT by 15%.
- In 2013, the BVSD received a federal grant to install an electric vehicle (EV) charging station and two electric vehicles (installation is pending Buy for American qualifications of the grant.)
- In 2014, BVSD plans to gather baseline mode share data by participating in the Boulder Valley Employee Travel Survey collected by Boulder County, City of Boulder, and University of Colorado.

**A 2011 survey conducted in 20 BVSD schools with the Safe Routes National Data Center showed that more than 50% of students arrive to school in means other than a single family vehicle (via walking, biking, etc.)**

## **Pillar 2: Improve the Health and Wellness of Students and Staff**

BVSD's commitment to the health and wellness of students is evidenced by the adoption of a new Vision and Mission, and Values which include addressing the intellectual growth, health and physical development, and social emotional well-being of students. The district has demonstrated its commitment to these values by employing a full-time Health and Wellness Coordinator who oversees and implements the Coordinated School Health (CSH) program. Within the CSH program, each component directly impacts student and staff wellness. BVSD's Operations Department also is actively striving to reduce environmental impacts and improve the health and wellness of its students, staff and visitors.

### **Element 2A: An integrated school environmental health program**

#### Hazardous Waste

BVSD complies with federal, state and local regulations for hazardous and non-hazardous waste disposal. Chemicals for disposal are collected routinely to be lab packed by hazard class and disposed at designated disposal sites. BVSD is reducing quantities for disposal annually. Environmental Services routinely

inspects asbestos building materials, coordinates abatement projects and updates building management plans to provide a safe environment for all students and staff. BVSD follows Asbestos Hazard Emergency Response Act (“AHERA”) compliance enforced by the Colorado Department of Public Health & Environment (“CDPHE”). AHERA compliance also requires Environmental Technician’s to have annual refresher courses and pass annual CDPHE exams for Asbestos Inspector, Management Planner, Supervisor, and CDPHE Air Pollution Control Division Regulation 8.

BVSD complies with the state mandate to test schools for radon, which was adopted in 1991. We also meet the mandate to test new or renovated schools within 19 months of completion. All results are recorded on building floor plans showing where and when each test was completed. Additionally BVSD has a regular schedule for retesting schools as recommended by the EPA. All areas with high radon readings have been mitigated to bring levels below the EPA suggested action levels.

Other highlights in our efforts to reduce hazardous wastes and properly dispose of these items are as follows:

- Environmental Services works with the Director of Science Curriculum, science teachers, custodians, art and photography teachers, and other school personnel to safely collect and dispose of chemicals, paints, fluorescent light bulbs, mercury, and other hazardous materials.
- Custodians collected over 1300 fluorescent lights bulbs last year for Environmental Services to send for safe disposal and recovery of the mercury in those bulbs.
- We filter and dispose of photo developer from high school photography classes.

### Indoor Air Quality (IAQ)

BVSD’s Environmental Services takes an aggressive approach to investigating indoor air quality concerns. We have monitors for in-house monitoring of oxygen, carbon monoxide, carbon dioxide, hydrogen sulfide, methane (LEL), temperature, relative humidity and respirable and non-respirable particles. All BVSD facilities are tobacco and smoke-free. Environmental Services technicians work with Maintenance HVAC personnel to monitor air-flow, fresh air supply, and problem areas. Investigations include a note of all cleaning products, air fresheners, and other chemicals that may trigger a reaction. We report findings to the school and keep a record of investigations. Last year, the District conducted an investigation of art room cleanliness in regards to the use of clay and control of silica dust, and as a result enhanced strategies for cleaning and managing clay with best practices in the field.

BVSD investigates and samples for mold as needed. After the recent flooding, Environmental Services investigated all schools to identify potential problems with IAQ. We took repeated air samples at 19 different schools to monitor airborne mold spore levels, temperature, and relative humidity. Investigations include a thorough search for any sign of mold or moisture in all spaces. BVSD works with Boulder County Public Health Department and the offices of emergency management for Boulder and Broomfield Counties to help resolve complex IAQ issues (such as those related to the recent flooding).

### Integrated Pest Management

Boulder Valley School District is a member of the Colorado Coalition for School Integrated Pest Management (“IPM”) program. This is a collaborative effort by Colorado State University, the U. S. Environmental Protection Agency, the Colorado Department of Agriculture, the Colorado Department of Health and Environment, the Colorado Department of Education, National Environmental Health Association, Colorado school districts and private pest control professionals, who work in concert to advance IPM in school districts throughout Colorado through shared experience and expertise.

Within the Colorado Schools IPM, BVSD is currently involved in two strategies that increase the effectiveness of IPM issues. The first is a collaborative development of Standard Operating Procedures that target pest issues that are specific to the Colorado zone. Once completed, these standards will serve as a resource for all School districts to deal with pests in an environmentally safe manner, with the least possible hazard to people, property, and the environment.

BVSD also is involved with a pilot program created by the Colorado IPM group which will implement a student science educational tool that educates children on the IPM principles. It is a five-part curriculum that

trains 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> graders to become trained “inPestigators.” They learn to identify what pests are, what is necessary for their habitat survival, and what is the best way to control pests and keep them out, all in a way that is gentle on the environment. BVSD is looking to connect a district teacher with this program in a pilot initiative.

IPM strategies are regularly used on BVSD grounds. BVSD stopped using Trimac in 2004. BVSD Maintenance uses strategies (including top dressing and aerating and using some organic fertilizers) to promote grass growth and provide good root zones for grasses, thus reducing and eliminating the need for pesticides. BVSD particularly avoids chemicals on play areas and fields. The district is testing the use of integrated pest management strategies, such as introducing weevils in select locations, to reduce invasive species (knapweed and goat heads). BVSD partners and coordinates with the University of Colorado and the City of Boulder on best practices for outdoor IPM strategies. On average, the district limited use of insecticide to 627 ounces/year (over the past four years). **Last year, the district used roughly 40 gallons of herbicide in select locations only (parking lots, sidewalks and some fence lines.) This is down from several hundred gallons of herbicide used in previous years.**

## **Element 2B: High standards of nutrition, fitness and outdoor time**

### Nutrition

BVSD Food Services ensures all students and staff have access to healthy, wholesome food every day. Over the past five years, BVSD has taken highly processed foods out of cafeterias and replaced it with fresh ingredients cooked from scratch. We purchase local and organic fruits, vegetables, meats and milk whenever possible. In the fall, through December, all of our apples, melons, peaches and pears come from Colorado’s Western Slope. We serve organic 1% Colorado milk and our beef and chicken is raised locally, as well as being antibiotic and hormone free. We take enormous pride in the quality of food we thoughtfully procure, cook and serve. **BVSD Food Services was recently awarded a \$96,000 USDA Farm to School Grant.** BVSD is only one of three districts in Colorado (71 in the country) to receive this grant. The grant will allow for even more local foods and produce on our menus and activities such as student farm visits beginning next year.

Every school cafeteria in the district has a salad bar, which always has animal and vegetable proteins available, as well as, an assortment of fresh vegetables and fruits. The salad bar is always gluten free and there are options for gluten free and/or vegetarian meal selections every day. BVSD also serves breakfast in every school, because we believe students that have breakfast have better concentration, are more focused, have fewer disciplinary issues and go to the nurse’s office less than students without breakfast.

BVSD Food Services hosts daily educational events in cafeterias across the district. On average, each elementary school receives four events a year - two food tastings and two nutrition education activities. Each middle school receives two chef demos. An Iron Chef competition is held annually, all schools are invited to participate by submitting recipes and participating in a ‘cook off’ to win a place on next year’s menu. In addition to the education provided directly by food service staff, 18 BVSD schools (over 7700 students) participate in Garden to Table programs in partnership with the Growe Foundation and parent volunteers.

BVSD Food Services also values its relationship with the Boulder community and participates in outreach events like BVSD Day at the Market, an event which occurs annually at the local farmer’s market. This community engagement fosters real connection with local food including hands-on learning, nutrition and mindful eating practices. BVSD participates in the Federal School Lunch and Breakfast program and has approximately 19% of students eligible for free/reduced lunch.

Last year the district implemented a new program called “From **Our Lands**, To your Hands Expo” in partnership with the Boulder Valley and Longmont Conservation District. The past two years, hundreds of BVSD students attended the half day event featuring farmers and the role of farming in our everyday lives, a presentation from CSU’s Extension Boulder County 4H representatives, and the Colorado Department of Agriculture.

### Physical Education and Activity

In September 2012, BVSD’s Board of Education amended its policy around physical activity of students in accordance with Colorado HB 11-1069. The goal statement of the BVSD Wellness Policy is, “to provide opportunities for every student in grades K-12 to develop the knowledge, attitudes, behaviors, and skills to be able to regularly participate in physical activity, to enjoy the short and long-term benefits of a physically active and

health enhancing lifestyle, and to reduce the risk of developing obesity and chronic diseases such as type two diabetes and cardiovascular disease.”

BVSD currently provides comprehensive Physical Education (PE) instruction to all students in grades K-12. PE is a part of the regular elementary curriculum, with 90 minutes allotted per week. At 6th through 8th grades, one-half unit is required, and in high school 15 credit hours are required for graduation. All PE classes conduct activities outside as much as weather and the unit taught permits. In addition, all elementary schools provide 40 minutes daily outdoor recess throughout the year. **BVSD students are getting 1160 minutes of physical activity a month through recess and PE alone, which is almost double the State requirement of 600 minutes a month.** Although there is no state mandate for outdoor activity (recess) in secondary schools, many of our middle schools provide an outdoor period during the day in addition to PE. BVSD offers before and after school care programs that emphasize physical activity. **BVSD also has comprehensive programs promoting biking and walking to school. These programs are outlined in section ID above.**

BVSD also offers many extended outdoor learning opportunities. For example a number of middle and high school students participate in Outdoor Education, a week long program devoted to learning real outdoor activities where science, math and language arts connections are emphasized. These activities range from camping at a National Monument to skiing in the Colorado Rockies.

Another unique outdoor education program that has been provided at BVSD for over 23 years is the CU Science Discovery and Outdoor Explorers program. Annually, this program provides approximately 60 teachers and 315 students from grades 5th-8th with the opportunity to have hands-on field experiences that meet Colorado Model Content Science Standards and prepare them to become stewards of their natural environment. The District also has a partnership with Thorne Nature Experience and the City of Boulder that results in all BVSD 4<sup>th</sup> graders taking a field trip to Sombbrero Marsh, to learn about wetlands and their unique role in the environment.

We recently received two \$100,000 grants from Kaiser Permanente to further enhance “walking and wheeling” to school. The first will support “activity breaks” during school hours and includes a monitoring component. The second will support bus passes for High School students.

### Health Education

The BVSD Health Education Program provides comprehensive, skills-based, age appropriate classroom instruction that addresses the physical, mental, emotional and social dimensions of health. Embedded in the health curricula are content and skills that are crucial for students to know, understand, and be able to perform in order to achieve and maintain optimal health and minimize negative health behaviors. Within this program, there is a heavy emphasis on developing health enhancing personal behaviors that can be used in real-world interactions both inside and outside the school setting and throughout life. We also offer a cycling education program called BLAST (details in section ID.)

### Health Services

Health Services staff work in collaboration with other health and educational professionals and assume a direct and responsible role in strengthening and facilitating student academic progress. The Registered School Nurse Consultants play a key role in identifying health concerns and treatment measures, providing instruction, counseling, and guidance in the maintenance of good health practices and disease prevention within the educational environment. They serve as a link between health care providers, families, school staff, and community agencies in promoting access to health services and in supporting continuity of health care for students.

### Counseling

BVSD offers numerous counseling and mental health resources to its students and families. Services include; professional school counselors, whose responsibilities include ensuring the social/emotional and academic well-being of all students as well as their postsecondary readiness, to school social workers and psychologists who evaluate and counsel students with Individualized Academic Plans. BVSD has over 120 school-based employees trained to provide mental health services. In addition, the District partners with Boulder County Public Health to provide free or low-cost mental health support and/or community resources to our

neediest families. BVSD also collaborates with Mental Health Partners to employ trained, Master's-level, licensed therapists to support middle and high school students.

The Counseling Department also maintains District Crisis Response Teams, specially trained to respond to traumatic events in schools and the community. The department also has implemented a Suspension Prevention/Reduction Program designed to allow students suspended for the most common offenses to reduce their days outside of school through successful participation in psychoeducational groups related to anger management, social success skills and substance use prevention with their parents.

### Staff Wellness

BVSD has many programs and opportunities for staff wellness – not only physical but emotional as well. One exemplary program offered through BVSD is the Eco Pass Program. This transit pass, highly subsidized by BVSD, gives holders yearlong use of public transit as well as many vouchers for local businesses. This program has multiple benefits; it promotes physical activity, creates a culture of walking, encourages patronizing of local businesses and greatly decreases automobile trips to and from school. Currently approximately 1,700 employees participate in the program. Other health and wellness benefits provided to staff include an Employee Assistance Program, which includes numerous discounts at physical and emotional health and wellness programs and opportunities for social/emotional development through mindfulness practices developed specifically for educators.

### Family and Community Involvement

The Parent Engagement Network (PEN) started as a Substance Abuse Task Force to encourage parent involvement in creating solutions to high-risk behaviors among youth. PEN has gone on to receive local and national attention for its interactive, positive approach to parent engagement and has presented its successful model to national, state, and local groups, such as the Department of Education, Search Institute, Parent Corps, and Assets for Colorado Youth. PEN and BVSD work collaboratively to provide many resources to parents and the community around parenting, including BVSD's free Thrive Handbook and newsletter for parents which covers such topics as wellness, diversity, mental and emotional health, human growth and development, safety, violence awareness and substance abuse.

We are thrilled to report that student behavior incident reports have declined in almost all areas (with the one exception of busses) over the past four years!!

## **Pillar 3: Effective Environmental and Sustainability Education**

**Element 3A: Interdisciplinary learning about the key relationships between dynamic environment, energy and human systems and**

**Element 3B: Use of the environment and sustainability to develop STEM content, knowledge and thinking skills**

### District Standards and Sustainability

The Boulder Valley School District's Vision for a Sustainably Literate Graduate follows:

As stewards of the planet, a sustainably literate graduate:

- Recognizes and understands the dynamic interconnections and interdependency of ecological, economic, and social systems
- Possesses knowledge and skills necessary to critically evaluate the potential positive and negative consequences of personal and collective actions on the natural and human environment
- Uses this knowledge to make conscious choices and create solutions which support a healthy and vibrant life for present and future generations

In the spring of 2011, BVSD's Office of Sustainability and Curriculum and Instruction created a Task Force with the purpose of providing recommendations for integrating sustainability into BVSD curriculum. The

Sustainability Education Task Force met four times in early 2011 and was comprised of teachers, BVSD staff and local and state environmental education experts. The efforts of this Task Force were designed to coincide with BVSD's alignment of district standards to the new state standards, beginning in the summer of 2011. The goals of the task force were:

- Address overarching questions: What should a BVSD student know about sustainability by the time they graduate? What should this look like on a K-12 continuum?
- Identify opportunities and discuss options for integrating sustainability into the BVSD curriculum;
- Provide recommendations for updating BVSD Curriculum Essential Documents to include concepts of sustainability
- Provide recommendations for more training and resources for staff in concepts of sustainability, while leveraging the expertise of community partners.

The Task Force successfully created the vision for a Sustainably Literate Graduate (above), thoroughly reviewed the new State Standards for preschool through high school in Science and Social Studies, and made recommendations for enhancing BVSD's standards to accomplish meeting the vision of a sustainably literate graduate on a K-12 continuum. The task force also made recommendations for following up with teachers regarding available resources.<sup>2</sup>As a result of this work, most of the recommendations from the task force were incorporated into BVSD's new Science Standards, and many of the recommendations were incorporated into BVSD's new Social Studies Standards.

To facilitate students becoming sustainably literate graduates, BVSD provides instructional experiences in sustainability concepts beginning in kindergarten with conceptual understandings including the science concept that "the properties of objects can be used to sort items for recycling" and the social studies concept that "individual actions can make the community better. For example, people clean up the highways or volunteer in shelters." (BVSD Curriculum Essential Documents, 2012) These concepts are learning expectations that are embedded within the BVSD curriculum for every student. Teachers in BVSD typically approach these concepts in the context of interdisciplinary science or social studies units that integrate reading, writing and mathematics, as well as art. For example, as part of an interdisciplinary STEM unit, teachers at Nederland Elementary in BVSD have second grade students examine the question of "What makes a healthy forest?" Students gather data about the forest adjacent to their school and work with the neighboring middle/senior school to analyze some of the data. Whittier Elementary in BVSD has participated in the international Roots and Shoots program in which every student, grades K-5, worked on a community-based action project. Many students chose projects with sustainability themes, including helping honeybee populations, reducing trash, and helping community housing residents plant gardens. Students were required to approach these projects from an interdisciplinary lens with a focus on civic responsibility and creating positive change.

Sustainability concepts continue to be embedded in the curriculum across grade levels, especially in the areas of science and social studies, with increasing depth and complexity. For example, in eighth grade, students in science are expected to "Identify natural and human processes that cycle carbon through the Earth system, the relative speed of these processes, and the impacts of changes to these processes" and to consider how "changes in climate conditions can affect the health and function of ecosystems and the survival of entire species," (BVSD Curriculum Essential Documents, 2012). In social studies, these same students would be expected to explore how "technology is used to find, plot, and express the patterns found in human and physical systems that affect society such as population density and growth analyses, impact of deforestation, and human and environmental changes that affect world health." (BVSD Curriculum Essential Documents, 2012) While interdisciplinary work is more difficult at the middle level, several schools have successfully implemented units such as an arts/science/sustainability project on air pollution at Manhattan Middle School, an arts/physical education/language arts/science project on fire ecology at Nederland Middle/Senior, and a project-based course called "Applied Science: Sustainability in Technology and Design at Casey Middle School." Casey is unique in

<sup>2</sup> [www.bvds.org/green/Documents/Memo\\_SustainabilityEducationTaskForce%20-FINAL.pdf](http://www.bvds.org/green/Documents/Memo_SustainabilityEducationTaskForce%20-FINAL.pdf) to see a memo describing the results of this work in detail.

its status as LEED Platinum Certified School with a number of sustainable features that are referenced in the school's curriculum.

When students in BVSD reach high school, they choose specific courses to fulfill their graduation requirements and prerequisites for their post-secondary experiences. High school courses with a strong emphasis in sustainability include:

- Earth Space and Geophysical Science
- Advanced Placement Environmental Science (7% of students in schools with this offering are enrolled)
- IB Environmental Systems and Societies
- World Geography
- Current World Affairs
- Advanced Placement Human Geography
- Environmental Sustainability
- Natural Resources Management
- Urban Agriculture

**In addition to this list, BVSD recently approved a new course titled Environmental Science and Sustainability, with an emphasis on inquiry, project-based activities with links to the community that will be offered in schools High Schools beginning next fall!**

A number of students interested in exploring sustainability concepts in even greater depth have conducted research projects with community-based mentors as part of the Science Research Seminar course. Student projects have included research on the feasibility of climate change mitigation, energy conservation, cleaner energy systems, water quality and invasive plant species.

Environmental Sustainability, Natural Resource Management and Urban Agriculture courses are part of BVSD's Career and Technical Education ("TEC") program. BVSD's TEC and Lifelong Learning Program also offer a Water Utility Science Program which introduces high school students and adults to career opportunities in the water and wastewater industry and provides specialized training courses leading to State of Colorado certifications. After completion of the Water Foundations course, students who are interested in pursuing a career in the water industry will have the option to select from one of four programs of study including Water Treatment Operations, Wastewater Treatment Operations, Water Distribution Operations and Wastewater Collections Operations.

The State of Colorado is currently transitioning to a new assessment system called the Colorado Measures of Academic Success ("CMAS"). The CMAS will assess the Colorado Academic Standards with social studies being assessed at grades 4, 7, and 12 and science being assessed at grades 5, 8, and 12. BVSD's learning outcomes for sustainability are embedded within the science and social studies Curriculum Essentials Documents, which are based on the Colorado Academic Standards. Many of BVSD's learning outcomes for sustainability go above and beyond the Colorado Academic Standards. After implementation of the CMAS, BVSD will evaluate whether there is the need and the capacity to add assessment tools in science and social studies.

#### Teacher and Staff Education about Sustainability

BVSD provides 1.5 days of district-based professional development to secondary level teachers of science and social studies. This year, one full day of that time consisted of a conference style format with a number of presenters and exhibitors from the Colorado environmental education community including the Colorado State Forest Service, The Colorado Geographic Alliance, The Colorado Alliance for Environmental Education, the Colorado Ocean Coalition, and Climate Education. **This year 91% of science teachers attended and 89% of social studies teachers attended.**

The Communications Division and the Office of Sustainability created the greenBVSD brand for the department and [bvsd.org/green](http://bvsd.org/green) website, which is a comprehensive website tracking new sustainability programs, related news clips, recommendations and tips for greening our schools, resources and program specific information relating to education, buildings, waste, transportation and related policy. The website is updated regularly.

The Office of Sustainability created a Green Projects greenBVSD newsletter (beginning in fall 2010). This publication is distributed annually, and began as an all staff distribution, and increased distribution to include staff and parents (fall 2011) and secondary students (fall 2013). The newsletter includes highlights from sustainability projects district wide.<sup>3</sup> The District distributes a bi-weekly newsletter to all teachers and staff. This email includes a greenBVSD portion, which shares highlights of sustainability projects, tips on greening schools and offices, and a “kudos!” section, to celebrate sustainability accomplishments.

Human Resources and the Office of Sustainability created education materials to include in the new employee orientation and the “Getting to Know Us” presentation. The Office of Sustainability has also developed a green office training and given many presentations upon request.

In honor of Earth Day each year, the Superintendent recognizes through his bi-monthly Honor Roll individuals and groups making outstanding efforts toward sustainability in BVSD (began in 2010). This has proven to be an excellent way to honor and highlight specific efforts to the Board of Education and larger community. The Sustainability Coordinator provides updates to the Board of Education on an as needed and project-related basis, and these updates are televised and open to the public.

### **Element 3C: Development and application of civic engagement, knowledge and skills**

In 2009, the District Office of Sustainability partnered with New Vista High School to create a sustainability action plan and activities at the school. New Vista was chosen as a pilot project to see what one school could accomplish in a year. The results were amazing and the student group “Earth Task Force Super Heroes!” flourished. Highlights of their accomplishments included hosting an “eat local” all-school lunch, organizing educational all-school assemblies in conjunction with the Alliance for Climate Education, creating an alternative transportation month, creating successful energy and water reduction behavior strategies, and raising grants to install solar panels and low flow toilets. (FY 09/10) The group has since grown from a few students to dozens of students. The group is sponsored and supported by the Cottonwood Institute. Most of the students in the Earth Task Force take a Community Adventure Program (“CAP”) Class at New Vista High School and receive credit for the class and for continuing as Earth Task Force Members.

In 2010, BVSD sponsored the S.U.P.E.R. Summit (SUPER=Students Understanding Personal Environmental Responsibility). More than 70 students and mentors, representing eight high schools, gathered at Casey Middle School to collaborate, celebrate and plan around sustainability at their schools. Thirteen community partners were there to offer resources and support the groups. The plans included merging existing environmental groups, augmenting recycling programs, applying for grants to install solar panels, creating five-year plans for sustainability, and increasing education and awareness around sustainability issues.

Also in 2010, The Student Accountability Advisory Committee (“SAAC”) created and implemented “Green Month,” a month in which all BVSD high schools were encouraged to compete to reduce energy consumption. The idea of “green month” was inspired by students on SAAC and supported by the Board of Education and the Office of Sustainability. The winner was selected by comparing energy data (electric and gas) for February of 2011 and February of 2010. Data were normalized by square footage and by the number of students at each school.

In 2011, nine BVSD schools participated in an expanded version of the previous year’s energy challenge, called “Renew Our Schools,” open to all middle and high schools in BVSD and St. Vrain to reduce energy at school and at home. The competition was a partnership between SAAC, the Center for Resource Conservation (“CRC”) and the City of Boulder. Summit Middle School was the first place overall winner of the competition and reduced in-school energy use by 22 percent during the competition and an estimated 68 percent in homes through the promotion of home energy action checklists (based on CRC’s calculations.)

In the 2012/13 school year, the District opened the energy challenge to all schools, and 22 schools participated. The competition had a strong STEM component, and required student green teams to audit their schools, take follow up action on the audit, educate their school community about energy conservation and reduce energy at the school. **BVSD has gone from virtually no active green teams to over 50% of our schools with**

<sup>3</sup> Visit [www.bvdsd.org/green/Pages/Newsletter.aspx](http://www.bvdsd.org/green/Pages/Newsletter.aspx) to view newsletter editions.

**students working to create a more sustainable school environment through energy reduction, recycling, gardening, eat local lunches and much more.**

Last year student leaders created a Green Graduation Pledge for graduating BVSD seniors. Students who signed the pledge to live a greener life upon graduation received a green wristband to wear at graduation. Students from nearly all of BVSD’s high schools participated.

Community Partners

In addition to formal coursework, BVSD partners with a number of community organizations to provide programming around sustainability. The Thorne Nature Experience provides a range of programming to BVSD schools, including field trips to the Sombrero Marsh Environmental Education Center for all fourth graders and in-school programs for many schools. The Keep It Clean Partnership provides programming around watershed conservation. Eco-Cycle has partnered extensively with BVSD to help school transition to zero waste facilities and provide recycling education to students.

BVSD is currently partnering with another local school district, the Colorado Alliance for Environmental Education and Thorne Nature Experience to conduct an assessment of environmental education (“EE”) offerings. This effort is a first of its kind. **The goal of the project is to ensure a continuum of environmental education and service learning opportunities with multiple contacts for pre-K through college for Boulder County youth.** The data collected will be used to create an EE report card, which will help us determine strengths, gaps, and overlaps in EE efforts and provide a starting point for discussions on how we can collaborate to further enhance EE in our schools.

Being part of Earth Task Force, which is sponsored by the Cottonwood Institute, is an inspiring experience. It is unique and amazing to take part in a club that actually does things about the sustainability issues we face in our community. I joined ETF to make a difference through small decisions that we make every day. At New Vista High School, I’m proud to be in ETF....Schools are a great place to start. –Ben Converse. BVSD HS student

**\*Follow up from Cover Page**

Our district is participating in ENERGY STAR Portfolio Manager, and we currently have 10 schools that qualify as being ENERGY STAR rated (see table below). Several of our schools also use EcoSchools as a framework for sustainability and Project Learning Tree resources. Pioneer ES has achieved Bronze and is working toward Silver in the EcoSchools program. This year, we are partnering with the Green Schools Alliance’s Green Cup Challenge for our Energy Challenge. We have 21 schools competing and the district administration building.

School Name	ENERGY STAR Score
Birch Elementary	96
Casey Middle	92
Horizons K-8	92
Aspen Creek K-8	87
Boulder High	80
Kohl Elementary	83
Lafayette Elementary	82
Summit Middle	80
Nederland Middle/Senior	77
Ryan Elementary	80

### **Boulder Valley School District Awards, Recognitions and Grants-National**

- National Center for Safe Routes to School awarded the “James L Oberstar Award” to Bear Creek Elementary in 2009.
- The Earth Day Network granted New Vista High School \$15,000 to install a solar panel system for Earth Day 2010.
- The Alliance for Climate Education (ACE) granted New Vista High School \$2,500 in 2010 for the Earth Task Force. This money was used to install low flow toilets and vending machine misers and to support the S.U.P.E.R. Summit and the 2nd Local Lunch in 2010-11.
- New Vista High School was awarded the Green Prize in Public Education from the National Environmental Education Foundation in February 2011. This award included \$10,000 for the school’s sustainability efforts.
- BVSD’s IT Department received InfoWorld’s Green 15 Award in 2011.
- Fairview High School received the President’s Environmental Youth Award from the Environmental Protection Agency in 2011.
- Heatherwood Elementary School received the Safe Routes To School “James L Oberstar Award” in 2011.
- The Boulder Valley School District was featured in the book “Greening America’s Schools” written by Paul Chapman and published by the National Association of Independent Schools in 2012.
- United States Green Building Council’s Leadership in Energy and Environmental Design awarded Casey Middle School “LEED Platinum” in 2012
- BVSD Food Services was awarded a \$96,000 USDA Farm to School Grant in 2013

### **Boulder Valley School District Awards and Grant-State and Local**

- BVSD was awarded Xcel Energy’s Efficiency Partner Recognition in 2010.
- New Vista High School was awarded the Youth Conservation Award from the Center for Resource Conservation in November 2011.
- The Center for Resource Conservation Renew Our School’s Program has awarded solar panel and monitoring systems to five BVSD schools. Value of the 2009 donation was \$120,652.24 (\$51,352.24 from CRC plus Xcel rebates). Value of the 2010 donation was \$151,883 (\$78,739 from CRC plus Xcel rebates).
- Boulder Community School of Integrated Studies, Douglass Elementary, Horizons K-8 and High Peaks Elementary received Bouldergeranic’s Sustainability Award in 2011 for their participation in the Green Star Schools Program.
- Century Link awarded BVSD \$4,193 through the Go Green for Schools cell phone recycling program in 2011.
- The Governor’s Energy Office granted BVSD \$4,950 to purchase Utility Manager Software.
- The City of Lafayette granted Pioneer Elementary School \$500 for the school’s green team in 2010-11.
- Great Outdoors Colorado (GOCO) granted the City of Boulder and BVSD \$83,900 to install an outdoor classroom at BCSIS/High Peaks Elementary Schools Building in 2010-11.
- Xcel Energy’s Renewable Energy Trust Fund and the Governor’s Energy Office Wind for Schools Program each granted BVSD \$10,000, for a total of \$20,000 to install a wind turbine at Nederland Middle/Senior.
- Eco-Cycle granted Douglass Elementary, Eisenhower Elementary, Ryan Elementary and Summit Middle School the Zero Waste-Green Star Schools Grant for the 2011-12 school year to purchase zero waste materials for events. Columbine Elementary, Creekside Elementary and Louisville Elementary won this grant in 2012-13.
- New Vista High School received the Award for Secondary Education from the Colorado Alliance for Environmental Education in 2012.
- Colorado Green Building Guild awarded Casey Middle School “Best Educational Facility” in 2012
- Kids 4 Clean Air Colorado awarded Manhattan Middle School eighth-grade student, Rae MacCarthy, First Prize in the 2013 Kids 4 Clean Air Colorado poster contest.
- The Denver Regional Council of Governments (DRCOG) awarded BVSD one of three “Employer Champion Awards” in 2013.
- The Colorado Alliance for Environmental Education Awarded Thorne Nature Experience and BVSD the “Program Award” for the 4th Grade Field Trip in 2013.
- 36 Commuting Solutions Transportation Management Organization awarded the “Workplace Ambassador of the Year Award” to Bob Jamieson, BVSD Director of Benefits and Landon Hilliard, BVSD TO School Program Coordinator in 2013
- Kaiser Permanente awarded BVSD two \$100,000 grants to support the Walk & Wheel Colorado program.

### **Boulder Valley School District Facility/Design Awards and Recognitions**

- The American Institute of Architects awarded Broomfield High School the "Merit Award for Design Excellence" in 2009
- The Council of Educational Facility Planners Int. awarded Casey Middle School the "Peak Design Award" in 2010
- The American Council of Engineering Companies awarded Casey Middle School the "Engineering Excellence Award" in 2011
- ColoradoBiz awarded Casey Middle School the "2nd place Colorado Sustainable Design Award" in 2011
- Engineering News Record awarded Casey Middle School “Region’s Best Overall Project” Award in 2011
- American Society of Interior Designers awarded Casey Middle School the “Crystal Award, Education Category” in 2011
- The Council of Educational Facility Planners International Rocky Mountain Chapter awarded Columbine Elementary School the “People’s Choice Award” in 2011
- Engineering News-Record awarded Columbine Elementary the "Best 2012 Projects Award of Merit: K-12 Education"



“Earth Task Force”-  
Green Team of  
Environmental  
Super Heroes at  
New Vista HS



©Kirsten Boyer Photography

Outdoor classroom at BCSIS/High Peaks ES



Green Roof at Casey MS



Solar panels at Boulder HS



Example of  
Clean Air  
Engines Off at  
Schools  
Program



Integrating environmental design through  
reuse of gym floor as wall covering and  
day lighting



Nederland  
Middle-Senior  
students on wind  
turbine  
installation day



Students participating in STEM activities



ED-GRS (2013-2014)



Students on a fieldtrip at  
Sombrero Marsh



Summit MS Principal, Superintendent, and  
Boulder County Commissioner celebrating  
5 years as a green star school