U.S. Department of Education Green Ribbon Schools

2011-2012 Presentation of Nominee to the
U.S. Department of Education

Denver Green School - Colorado
PART I - ELIGIBILITY CERTIFICATION

School and District’s Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school’s eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

2. The school achieves or comes close to achieving the goals of all three green Ribbon Pillars: 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.

3. The school has been evaluated and selected from among schools within the state or Nominating Authority’s jurisdiction (BIE, DoDEA), based on documented achievement toward the three Green School Pillars and Elements.

4. Neither the nominated public school nor its public school district is refusing 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.

5. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public 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.

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

7. 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 public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.

8. The school meets all applicable federal, state, tribal and local 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

Type of School: ECE-8 Denver Public School

Name of Principals: Mr. Frank Coyne, Mr. Craig Harrer

Official School Name: Denver Green School

Mailing Address: 6700 East Virginia Ave.
Denver, CO 80224

County: Denver  
School Code: 2125

Telephone: (720) 424-7480  
Fax: (720) 424-7537

Website: www.denvergreenschool.org

Email: frank_coyne@denvergreenschool.org, Craig_Harrer@denvergreenschool.org

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4 and certify that to the best of my knowledge all information is accurate.

[Signature]

Date: 3/16/12

Name of Superintendent: Tom Boasberg

District Name: Denver Public Schools  
Telephone: 720-423-3210

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4 and certify that to the best of my knowledge all information is accurate. I concur that this is one of the highest performing green school applicants in our state.

[Signature]

Date: 3/16/12
PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your state’s highest achieving green school efforts in approximately 600-800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School. Be sure to note if students were actively involved in preparing the application.

This summary should be written as a stand-alone document. It will provide the ED review panel with an overview of the school’s green activities that were detailed in the application to the state, DoDEA or BIE evaluators. If the school is awarded a U.S. Department of Education Green Ribbon, this information may be shared with other schools, candidates for next year, the press, and the public.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

For the pilot year, the Nominating Authority must review nominated schools for high achievement based on the schools’ documented achievement toward reaching the goals of each of the three U.S. Department of Education Green School Pillars and elements. For each school being nominated by the Authority to ED, please attach state (or equivalent) evaluation materials (application) based on the Nominating Authority Evaluation Support Framework provided by ED to facilitate your evaluation of schools.

The Nominating Authority must review and sign the following certification for each school being nominated to ED.

Nominating Authority’s Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school’s eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)

2. The school achieves or is one of those overseen by the Nominating Authority which comes the closest to achieving the goals of all three green Ribbon Pillars: 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.
toward the three Green School Pillars and Elements.

4. The school meets all applicable federal civil rights and federal, state, tribal and local 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, including the award and eligibility requirements on pages 2-4, and certify, to the best of my knowledge through a documentary verification assessment, that the school meets the provisions in this Part of the Nominee Presentation Form.

(Date 3 -20 -2012)

(Nominating Authority’s Signature)

Note to Nominating Authority: The application, including the signed certifications and documentation of evaluation in the three pillars should be converted to a PDF file and emailed to Director, ED-Green Ribbon Schools at green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

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.
Denver Green School Summary of Achievements

The Denver Green School (DGS) is the ideal school to represent Colorado's efforts to provide meaningful education about, and for, sustainability. The founding partners of DGS, who together represent over 160 years of educational experience, dedicated more than two years to the planning and organizing of the school. As they studied existing educational options, each one of them knew that something better than the status quo could be created. DGS first opened its doors in August of 2010 as a neighborhood school having the ability to implement its own unique program design. The school's emphasis on project-based learning allows teachers and students to engage in relevant, self-directed, teacher-facilitated learning. As a national beacon for real-world learning, DGS provides a practical hands-on, brains-on experience that includes students, staff, families and members of the community. DGS aims to foster leadership skills in students; developing their knowledge base and skill sets required to effectively meet the challenges of the 21st century. Issues of sustainability; from personal, community, national and global perspectives are integrated throughout the curriculum.

The school's Innovation Plan, developed with the help of a grant from the Walton Family Foundation, enabled DGS to achieve Innovation Status within the Denver Public School system. In a show of support for DGS, Denver Public Schools (DPS) Superintendent Tom Boasberg chose DGS to host a press conference about "...the need to bring great education opportunities to every neighborhood of the city...".

DGS is also attracting national attention, gaining accolades for both the City and the School District. US Secretary of Education, Arne Duncan praised DGS in his speech at the National Green Schools Conference in Denver. DGS also received a site visit from the Under Secretary of the USDA, Dr. Janey Thornton. Her team was impressed with the innovative programs DGS is implementing in our cafeteria and curriculum and was excited about the design of the middle school building that will be built this summer.

The DGS building and grounds are learning laboratories. For example, last year 2nd graders conducted a school-wide light and energy audit. They counted every light fixture in the school then, using light meters, they determined that 50% of the light bulbs could be removed. They then made a presentation to the school administrators and received permission to work with the facilities manager to remove the excess bulbs. Their project now saves the school $1500 per year. This year while the school's 6th grade class began a school-wide water audit, the 1st graders began a school-wide Terra Cycle project. The project generates funds through the collection and up-cycling of all used glue sticks, candy wrappers and juice bags. The school's 98kw rooftop photovoltaic solar array not only provides electricity but students using web-based, real time tools, are able to monitor it checking on energy production and carbon savings. The school garden and one acre farm uses 1 million gallons less water per year than the turf they replaced. High efficiency plumbing fixtures have also been installed throughout the school.

DGS works with the Cloud Institute for Sustainability Education. The knowledge, skills, attitudes and habits of mind of Education for Sustainability (Efs) are embedded in The Cloud Institute's standards. Aligned to national and state educational standards, each Efs Standard has a set of indicators used to guide educators as they infuse the school culture, curriculum, instruction and assessment practices with Education for Sustainability. By meeting and exceeding these Efs Standards, young people are being prepared to participate in, and ultimately lead, the shift toward a sustainable future.
DGS endeavors to instill a passion for learning, encouraging students to acquire a sense of personal responsibility for their community, school and education. While students were not directly involved with the writing of this application, when time allows they do contribute to grant and award proposals. In a recent service learning grant proposal for the garden, Zach wrote:

I and many others have learned how to plant a garden. This will help us in the future when we want to plant a garden of our own. When I plant my own garden I will remember working in the garden at DGS and realize how much I learned in that garden. Learning about gardens is a great learning experience at DGS.

The garden is also a great way to learn academics. We can learn about how our plants originated and when. Also, we can write about the garden. Instead of reading about plant life we would go into the garden. At DGS we learn how to make dreams happen.

In preparing students for the 21st century, Denver Green School embodies what sustainable education looks like. The school will be an excellent ambassador of the U.S. Department of Education Green Ribbon School award.
Green Ribbon Schools

### PART I: COVER PAGE (Complete and attach as the first page of proposal)

<table>
<thead>
<tr>
<th>School Name:</th>
<th>Denver Green School (DGS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Name (if applicable):</td>
<td>Denver Public Schools</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>6700 East Virginia Ave., Denver, CO 80220</td>
</tr>
<tr>
<td>School Website:</td>
<td>denvergreenschool.org</td>
</tr>
<tr>
<td>School Code*:</td>
<td>2125</td>
</tr>
<tr>
<td>District Code*:</td>
<td>0880</td>
</tr>
<tr>
<td>Principal Name:</td>
<td>Craig Harrer</td>
</tr>
<tr>
<td>Telephone:</td>
<td>(720) 424-7480</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:Craig_Harrer@denvergreenschool.org">Craig_Harrer@denvergreenschool.org</a></td>
</tr>
<tr>
<td>Signature:</td>
<td></td>
</tr>
</tbody>
</table>

**Lead Applicant Name (if different than principal):**

| Telephone:              |                                                   |
| E-mail:                 |                                                   |

**Signature**: ...

**School Type:**
- [X] Public
- [] Institute Charter School
- [] Private

**Level Served:**
- [] Elementary (PK – Grade 5)
- [X] K-8
- [] Middle (Grades 6-8)
- [] High (Grades 9 – 12)

**Percentage of students eligible for Free and Reduced Lunch:** 50%

**Is your school participating in a local, state, or nationally recognized green school program (e.g., National Wildlife Federation Eco-Schools USA, Project Learning Tree’s Green Schools, LEED or CO-CHPS)? If yes, please explain below the program and level (if applicable) your school has achieved:**

- [X] Yes
- [ ] No

We are members of the Denver USGBC LEED committee on Green Schools

**Has your school, staff or student body received any green school, environmental, healthy school, environmental education, or sustainability education awards? If yes, please list below:**

- [ ] Yes
- [X] No

---

*Private Schools: If the information requested is not applicable, write N/A in space provided.*

**By signing this application, Principal and/or Lead Applicant assure that the information provided is accurate to the extent possible.*
2012 Green Ribbon Schools
Application Template

Directions: This template must be used to complete the application. Answer each question below by checkbox or typing in the information requested. Free responses are limited to the word limit noted following the question. Note: to activate the checkboxes below, double click on the box and select 'checked' when prompted. No written narrative is required outside of what is requested within this template.

Part II
Pillar I: Environmental Impact and Energy Efficiency

Buildings, grounds and operations goal: The school has made significant progress toward "net zero" environmental impact (zero carbon, solid waste, and hazardous waste footprints). See Attachment B Glossary of Terms for additional information.

Pillar I includes four main elements:
- Reduced or eliminated greenhouse gas emissions (including, but not limited to: construction, maintenance, cleaning, and contaminants from mechanical systems), using an energy audit or emissions inventory and reduction plan, cost-effective energy efficiency improvements, conservation measures, and/or on-site renewable energy and/or purchase of green power;
- Improved water quality, efficiency, and conservation (including storm water and potable water);
- Reduced solid and hazardous waste production, through increased recycling, reduced consumption, and improved management, reduction, or elimination of hazardous waste streams; and
- Expanded use of alternative transportation to, during and from school, through active promotion of existing locally-available, energy-efficient options and implementation of alternative transportation supportive projects and policies.

Each question in this section is designed to measure your school's progress towards Pillar I and its associated 4 elements.

A. Reduced or eliminated greenhouse gas emissions, using an energy audit or emissions inventory and reduction plan, cost-effective energy efficiency improvements, conservation measures, and/or on-site renewable energy and/or purchase of green power.

Has your school received EPA ENERGY STAR certification?  
If yes, in what year was the certification earned?  ________

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

Has your school reduced its total non-transportation energy use from an initial baseline? If yes, answer the following:

Percentage reduction: 47%  
Measurement unit used (kBTU/Square foot or kBTU/student): kilowatt hrs/ year or kwh/yr

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Time period measured:</td>
<td>From: 01/01/2011</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>What percentage of your school’s energy consumption is derived from:</td>
<td></td>
</tr>
<tr>
<td>On-site renewable energy generation:</td>
<td>47% of electrical</td>
</tr>
<tr>
<td>In what year was your school constructed?</td>
<td>1960; addition in 1992</td>
</tr>
<tr>
<td>Has your school constructed a new building or renovated an existing building in the past ten years?</td>
<td>☒ Yes ☐ No</td>
</tr>
<tr>
<td>Does any part of your existing building meet green build standards (for example, LEED, CO-CHPS, Green Globes, or other standards)?</td>
<td>☐ Yes ☒ No</td>
</tr>
<tr>
<td>Does your school reduce or offset the greenhouse gas emissions from building energy use?</td>
<td>☒ Yes ☐ No</td>
</tr>
<tr>
<td>Which green building practices is your school using to ensure your building is energy efficient?</td>
<td></td>
</tr>
<tr>
<td>☐ School has fully implemented the Facility Energy Assessment Matrix within EPA’s Guidelines for Energy Management.</td>
<td></td>
</tr>
<tr>
<td>☐ School Building has been assessed using the Federal Guiding Principles Checklist in Portfolio Manager.</td>
<td></td>
</tr>
<tr>
<td>☒ School has an energy and water efficient product purchasing and procurement policy in place.</td>
<td></td>
</tr>
<tr>
<td>☒ Other: _Solar panels, sola-tubes (natural day light), light use reduction plan and policy</td>
<td></td>
</tr>
<tr>
<td>B. Improved water quality, efficiency, and conservation.</td>
<td></td>
</tr>
<tr>
<td>Can you demonstrate a reduction in your school’s total water consumption (measured in gallons/occupant) from an initial baseline?</td>
<td>☒ Yes ☐ No</td>
</tr>
<tr>
<td>If yes, what is the initial baseline?</td>
<td>4.8 M Gallons/Year</td>
</tr>
<tr>
<td>Current Consumption:</td>
<td>2.45 MGY 2011</td>
</tr>
<tr>
<td>Which of the following practices does your school employ to increase water efficiency and ensure quality? (Please check all that apply)</td>
<td></td>
</tr>
<tr>
<td>☒ Our school conducts annual audits of the facility and irrigation systems to ensure they are free of significant water leaks and to identify opportunities for savings.</td>
<td></td>
</tr>
<tr>
<td>☐ Our school has a smart irrigation system that adjusts watering time based on weather conditions.</td>
<td></td>
</tr>
<tr>
<td>☒ Our school’s landscaping is water-efficient and/or regionally appropriate.</td>
<td></td>
</tr>
<tr>
<td>☒ Our school has not been cited within the past three years for failure to meet federal, state or local potable water quality standards.</td>
<td></td>
</tr>
</tbody>
</table>
Taps, faucets, and fountains at our school are cleaned at least twice annually to reduce contamination and screens and aerators are cleaned at least annually to remove particulate lead deposits.

☐ Our school has a program to control lead in drinking water (including voluntary testing and implementation of measures to reduce lead exposure).

**Our school's drinking water comes from:**

☒ Municipal water source
☐ Well on school property
☐ Other: 

**Please describe how the water source is protected from potential contaminants.** *(Maximum 100 words)*

School water is provided by Denver Water and thus meets stringent national, state and local standards.

**Please describe any additional efforts your school has made towards improving water quality, efficiency, and conservation.** *(Maximum 200 words)*

The school garden and one acre farm established at the Denver Green School use much less water per year than the turf they replaced. High efficiency fixtures have been installed throughout the school. This year, as part of their Education for Sustainability curriculum, the school’s 6th grade class is conducting an in-depth school-wide water audit in order to discern other ways in which we can conserve water.

C. Reduced solid and hazardous waste production, through increased recycling, reduced consumption, and improved management, reduction, or elimination of hazardous waste streams.

**What percentage of solid waste is diverted from landfilling or incinerating due to recycling and/or composting (i.e., Recycling Rate)?**

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected).

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected).

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected).

Recycling Rate = \( \frac{(B + C)}{(A + B + C)} \times 100 \)
Which of the following practices does your school employ to reduce waste?

- Our school has a program in place to promote waste reduction practices (for example, reduced paper use, use of durable products).
- Our school has implemented policies to reduce the amount of ink used in printing (for example, toner saver features, preferred font selections).
- Our school does not sell bottled water.
- Our school has installed a hydration station and/or conducted a campaign to promote use of reusable water bottles.
- Our school has reduced or eliminated Styrofoam and other disposable trays and utensils in our lunch room.
- Our school actively involves students and staff in our waste reduction and recycling practices.

<table>
<thead>
<tr>
<th>What percentage of your school's total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council, Sustainable Forestry Initiative, American Tree Farm System or other certification standard. (If a product is only 30% recycled, only 30% of the cost should be counted)</th>
<th>95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of the total office/classroom paper content by cost is totally chlorine-free (TCF) or processed chlorine free (PCF)</td>
<td>0%</td>
</tr>
<tr>
<td>How much hazardous waste does your school generate? (lbs/student/year)</td>
<td>0</td>
</tr>
</tbody>
</table>

Please provide the following information about your school's hazardous waste:

<table>
<thead>
<tr>
<th>Types of hazardous waste generated:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>How hazardous waste is monitored:</td>
<td>N/A</td>
</tr>
<tr>
<td>How the amount generated is calculated:</td>
<td>There is no hazardous waste generated at the school.</td>
</tr>
</tbody>
</table>
Which of the following benchmarks has your school achieved to minimize and safely manage hazardous waste? (Please check all that apply)

☐ Our school has a hazardous waste policy for storage, management, and disposal that is actively enforced.

☒ Our school has a comprehensive chemical procurement system that ensures chemicals are not over purchased and that restricted and prohibited chemicals do not enter the school. The system is applied to all chemicals, including paints, pesticides, cleaning chemicals and those used in science labs and vocational areas.

☒ Our school disposes of unwanted computer and electronic products through an approved recycling facility or program.

☐ Our custodial program has been certified by the ISSA Cleaning Industry Management Standard - Green Building or other equivalent standard. Other: ____________________________

☐ All our computer purchases are Electronic Product Environmental Assessment Tool (EPEAT) certified products.

Please provide the following information about the cleaning products used in your school:

What percentage by volume of all cleaning products in use are “third party certified” green cleaning products?

☐ 90%

What specific standard does the school use?

☐ Green Seal Certified

What other indicators do you have of your school’s reduction of solid waste and elimination of hazardous waste (e.g., custodial, maintenance, storage and disposal of science lab chemicals)? (Maximum 200 words)

Our school’s 1st graders recently began a school-wide Terra Cycle project in which they figured out which types of non-recyclable trash were most common at the school and developed a system to collect it. For example, the school is now collecting all of our used glue sticks, candy wrappers and juice bags to be sent to Terra Cycle. Not only does this initiative reduce our solid waste, but it also generates money to support service learning projects in the school.

D. Expanded use of alternative transportation to, during and from school, through active promotion of existing locally-available, energy-efficient options and implementation of alternative transportation supportive projects and policies.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of your students walk, bike, bus, or carpool (2 + students in the car) to/from school?</td>
<td>66%</td>
</tr>
<tr>
<td>Does your school participate in the Colorado Safe Routes to School Program?</td>
<td>☐ Yes  ☒ No</td>
</tr>
<tr>
<td>How was this data collected and calculated? <em>(Maximum 100 words)</em></td>
<td></td>
</tr>
<tr>
<td>The school has a student population of 350 students. Of these, school documentation shows that 156 (44%) take the bus to and from school on a daily basis. Of the remaining 194 students, about 1/3 of them (64 students, 18% of total) come to school with siblings or carpool. Weather permitting, another 15 students (4% of total) live close enough either walk or ride their bikes. Thus: Students on the Bus $156 = 44%$ Students walking or riding bikes $15 = 4%$ Students carpooling $64 = 18%$ Total $66%$.</td>
<td></td>
</tr>
<tr>
<td>Which of the following policies or programs has your school implemented?</td>
<td></td>
</tr>
<tr>
<td>☐ Our school has designated carpool parking stalls.</td>
<td></td>
</tr>
<tr>
<td>☐ Our school has a well-publicized no idling policy that applies to all vehicles (including school buses).</td>
<td></td>
</tr>
<tr>
<td>☒ Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.</td>
<td></td>
</tr>
<tr>
<td>☐ Our school has established Safe Pedestrian Routes to school which are distributed to parents and posted in our office.</td>
<td></td>
</tr>
<tr>
<td>☐ Our school participates in a &quot;Safe Routes to School&quot; program.</td>
<td></td>
</tr>
<tr>
<td>Describe how your school transportation use is efficient and environmentally benign (e.g. the percentage of school-owned electric/hybrid/alternative fuel vehicles in your fleet, or other indicators of significant reductions in emissions)</td>
<td></td>
</tr>
<tr>
<td>Our school does not own any vehicles, although 25% of the faculty regularly ride their bikes or carpool to work. <em>(Maximum 100 words)</em></td>
<td></td>
</tr>
</tbody>
</table>
This is the end of Pillar 1. Please describe any other accomplishments or efforts your school has made towards reducing/eliminating environmental impacts or improving your energy efficiency. (Maximum 200 words)

As mentioned above, the school farm has drastically reduced our water use. As it takes energy to treat and transport water, the reduction of water use also eliminates the use of that energy that would be "embodied" in the saved water. Our school is also the first school in the state of Colorado to have an on-site Farm to Cafeteria program. During harvest season, 150 pounds of organic produce are WHEELBAROwed 150 yards from the farm to the school cafeteria. No fossil fuels are used in the production or transport of this fresh, super local, nutritious and delicious food for our students.

Part III
Pillar II: Healthy School Environments

Healthy student and staff environment goal: The school improves the health and performance of students and staff. Pillar 2 includes two main Elements.

1) An integrated school environmental health program based on an operations and facility-wide environmental management system that considers student and staff health and safety in all practices related to design, construction, renovation, operations, and maintenance of schools and grounds.

2) High standards of nutrition, fitness, and quantity of quality outdoor time for both students and staff.

Each question in this section is designed to measure your school's progress toward Pillar 2.

A. An integrated school environmental health program based on an operations and facility-wide environmental management system that considers student and staff health and safety in all practices related to design, construction, renovation, operations, and maintenance of schools and grounds.

Which of the following practices does your school employ with regards to pest management? (Please check all that apply)

- Our school has an integrated pest management plan in place to reduce and/or eliminate
pesticides. Pest control policies, methods of application, and posting requirements are provided to parents and school employees.

☒ Copies of pesticide labels, copies of notices, MSDS and annual summaries of pesticide applications are all available and in an accessible location.

☒ Our school prohibits children from entering a treated area for at least 8 hours after the treatment or longer if required by the pesticide label.

**Which of the following practices does your school employ to improve ventilation and contaminant control? (Please check all that apply)**

☒ Our school meets ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality).

☐ Our school has installed one or more energy recovery ventilation systems to bring in fresh air while recovering the heating or cooling from the conditioned air.

☒ Our school has eliminated mercury-containing thermometers, chemical compounds, art chemicals, etc. and elemental mercury.

☒ Our school disposes of any unwanted mercury laboratory chemicals, thermometers and other devices in accordance with federal, state, and local environmental regulations.

☒ All of the ground contact classrooms at our school have been tested for radon within the last 24 months.

☒ Our school has carbon monoxide alarms that meet the requirements of the National Fire Protection Association code 720.

☒ There are no wood structures on school grounds that contain chromate copper arsenate.

☐ Our school has an asthma management program that is consistent with the National Asthma Education and Prevention Program's (NAEPP) Asthma Friendly Schools guidelines.

☒ Our school has a comprehensive indoor air quality management program that is consistent with the EPA Indoor Air Quality (IAQ) Tools for Schools.

☒ Our school visually inspects all buildings on a monthly basis to ensure they are free of mold, moisture, and water leakage.

☒ Our school’s indoor relative humidity is maintained below 60%. Our school has moisture resistant materials/protective systems installed (i.e., flooring, tub/shower, backing, and piping).

☒ Our school has a chemical management program that includes: chemical purchasing policy (low or no-VOC products), storage and labeling, training and handling, hazard communication, spills (clean up and disposal), and selecting EPA's Design for the Environment approved cleaning products.

<table>
<thead>
<tr>
<th>What is the percentage of classrooms that have outside windows in your building?</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate the number of complaints received regarding thermal comfort (e.g., too hot, too cold):</td>
<td>1-2 per week</td>
</tr>
<tr>
<td>What percentage of all classrooms with radon levels greater than 4 pCi/L have been mitigated in conformance with ASTM E2121?</td>
<td>N/A</td>
</tr>
</tbody>
</table>
If your school has combustion equipment, is there an inventory of them and are they annually inspected to ensure they are not releasing Carbon Monoxide? (See Attachment A for Resources)

☐ Yes
☐ No
☒ Our school does not have combustion appliances

B. High standards of nutrition, fitness, and quantity of quality outdoor time for both students and staff.

Which practices does your school employ to promote nutrition, physical activity and overall school health? (Please check all that apply)

☒ Our school participates in the USDA's Healthier School Challenge or another nutrition program.
☒ Our school participates in a Farm to School program or other program to utilize local food in our cafeteria.
☒ Our school has an onsite food garden.
☒ Our school garden supplies food for our cafeteria.
☒ Our students spend an average of at least 120 minutes per week (over the past year) in school supervised physical education.
☒ At least 50% of our students' annual physical education takes place outdoors.
☐ At least 50% of our students have participated in the EPA's Sunwise program (or other equivalent UV protection and skin health education program).
☒ Our school uses a coordinated school health approach or similar initiative to address overall school health.

Please describe any additional efforts your school has made in terms of the school's built and natural environment (including unique community and/or business partnerships) to promote overall school health and safety. (Maximum 200 words)

DGS works closely, with Denver Urban Gardens (DUG). They provide, at no cost, professional planning expertise, construction coordination and supervision, curriculum support, Master Gardener Training and volunteers on work days. DUG has helped establish over 100 community gardens in the Denver Metro area and we are grateful to have their assistance with the garden. DGS is also partnering with Sprout City Farms to build and operate the school farm. Sprout City Farms cultivates urban farms on underutilized land and together we have established the first on-site Farm to Cafeteria program in the state of Colorado. We have an on-going relationship with the organization Playworks that provides the school with a full time coach who helps keep kids engaged in healthy, constructive activities during recess.

Part IV

Pillar III: Environmental and Sustainability Education

Student achievement goal: 100% of the school's graduates are environmentally and sustainability literate. Pillar III includes three main elements.
1) Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems.

2) Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy.

3) Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community.

Each question in this section is designed to measure your school's progress toward Pillar III.

A. Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems.

Which practices does your school employ to support environmental and sustainability literacy? (Please check all that apply)
- Our school has an environmental or sustainability literacy graduation requirement.
- Our school has identified specific standards related to environmental and sustainability literacy or used the standards in Colorado’s environmental education plan.
- Environmental and sustainability concepts are integrated throughout the curriculum.
- Environmental and sustainability concepts are integrated into classroom based and schoolwide assessments.
- Professional development opportunities in environmental and sustainability education are provided for all teachers.
- Our school has a student green team or other student group responsible for leading the school's conservation efforts that is supported or advised by school staff.

| Does your school serve grades 9 - 12? | □ Yes  ☒ No |

B. Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy.

Does your school curriculum make connections between classroom and college and career readiness, in particular post-secondary options in environmental and sustainability fields (for example, CTE Green Sustainable Design and Technology course)?
- ☒ Yes  □ No

C. Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community.

Do students conduct an age-appropriate, self-selected, civic/community engagement project at every grade level?
- □ Not at all grade levels
- □ Not at all

Which of the following features does your school have to connect students to the school grounds? (check all that apply)
- ☒ School vegetable garden
- □ Wildlife or native plant habitats
Outdoor classroom
☐ Environmental restoration projects (on campus or nearby)
☐ Rain garden
☒ Walking or running trails

What percentage of the school grounds are devoted to ecologically or socially/culturally (e.g., playgrounds, outdoor spaces designed and used regularly for social interaction, athletic or recreational areas, etc.) beneficial uses, including those that give consideration to native wildlife or community connections?

☐ Yes
☐ Not at all grade levels
☐ Not at all

Do students have meaningful outdoor learning experiences (experiences that engage students in critical thinking, problem solving and decision making) at every grade level?

☐ Yes
☐ Not at all grade levels
☐ Not at all

Please describe your partnerships with local academic, business, government, nonprofit and informal science institutions to help advance your school, other schools and the greater community toward the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 300 words)

Denver Green School received a $300,000 grant from the Walton Family Foundation. The grant was used to help create our School Innovation Plan and to set up our Education for Sustainability (Efs) Standards. The Innovation Plan enabled DGS to achieve Innovation Status within the Denver Public School system, allowing the school to implement Efs standards concurrent with the Colorado Core Content standards. In a show of support for DGS, Denver Public Schools (DPS) Superintendent Tom Boasberg recently chose DGS to host a press conference about “...the need to bring great education opportunities to every neighborhood of the city...”.

The school also has received numerous grants from corporations including $5,000 from Lowe’s and $8,000 from a local Whole Foods Market. A local landscape contractor donated $10,000 worth of materials and in kind services to help build the garden area. Also teams from KIND snack bars and Wells Fargo Banks have contributed volunteer hours at the farm and garden.

As mentioned above, we work closely with Denver Urban Gardens (DUG) and Sprout City Farms to keep our farm and garden vibrant and productive. Also we are fortunate to be enjoying an amazing group of 13 young AmeriCorps volunteers who are helping out in the school with everything from classroom instruction to farm and garden activities.

Recently, the school’s PTA partnered with a local restaurant, Gaia Bistro, to sponsor a fundraising dinner. Funds from this special event are being used to support the school’s 6th and 7th graders studies of food and nutrition by sending them to see a lecture by author Michael Pollan.

Do you have a curriculum of environmental teaching?

☐ Yes
☐ Not at all grade levels
☐ Not at all
Please describe how you are using your building as a sustainable teaching tool. (Maximum 200 words)

We view our building and grounds as a learning laboratory. Last year our 2nd graders conducted a school-wide light and energy use audit. They counted every light fixture in the school then, using light meters, they determined that 50% of the light bulbs could be removed. They made a Power Point presentation to the school administrators and received permission to work with the facilities manager to remove the bulbs. Their project saves the school $1500 per year. As mentioned above, this year the 6th graders are conducting a water audit. Also students using web-based, real time tools, monitor the school’s 98kW rooftop photovoltaic solar array checking on energy production and carbon savings.

Please describe other methods and measurements your school uses to ensure matriculating students are environmentally and sustainability literate. (Maximum 200 words)

Denver Green School works closely with the Cloud Institute for Sustainability Education. The knowledge, skills, attitudes and habits of mind of Education for Sustainability (EfS) are embedded in The Cloud Institute’s EfS Standards and corresponding Performance Indicators. Aligned to national and state educational standards, each EfS Standard has a set of coded Performance Indicators used to guide educators as they infuse their school culture, curriculum, instruction and assessment practices with Education for Sustainability. We believe that by meeting these EfS standards, young people will be prepared to participate in, and lead with us, the shift toward a sustainable future.
Sprout City Farms is cultivating a one-acre farm in the schoolyard of the Denver Green School! This community farm nourishes the neighborhood and school by operating a CSA, farm stand, donating food, and selling food to the school cafeteria. The farm is also used as a community learning and volunteer space for youth and adults alike. The model is breaking new ground in the way farms can be integrated into institutions and nearby communities.

What we value

- Healthy Food Access
- Community Participation and Education
- Policy and Awareness
- Ecological Stewardship

Get involved

Visit our website and Facebook page to learn about volunteer opportunities and keep up to date on the latest Sprout City Farms news.

www.spongacityfarms.org
www.facebook.com/SproutCityFarms
email: info@spongacityfarms.org

Cultivating urban farms on underutilized land
Bringing good food to neighborhoods
{Rooting community farms in the city}
Denver Green School
Education for Sustainability Highlights

What is Education For Sustainability?
Education for Sustainability (EFS) is a transformative learning process that equips students, teachers, and school systems with the new knowledge and ways of thinking we need to achieve economic prosperity and responsible citizenship while restoring the health of the living systems upon which our lives depend. At DGS, we employ a “hands-on brains-on approach” to integrate EFS alongside our Common Core standards to reach high levels of academic achievement and create problem-solvers for the 21st Century.

3rd Grade: Energy and Light Audit
The 3rd grade EFS unit that our students just completed is on energy. This guiding concept led them to an investigation of energy consumption within our school building and how to improve efficiency. After collecting initial data about light usage, watts consumed, and cost to electrify our school in 2nd grade, the 3rd graders utilized many of their math and literacy skills to plan for cost and energy savings for our school and other neighborhood schools. Since removing 200 unneeded light bulbs last year and developing a “light sheriff” stewardship plan, DGS saves $1200 annually and now will be working with high school students at George Washington to develop a plan for their school.

6th Grade: Our Food at DGS and Harvest Festival
The beginning of the school year coincides with harvest time on the farm here at DGS. The 6th graders took advantage of this opportunity by creating a school-wide Harvest Festival to celebrate the super-local, organic produce that comes from Sprout City Farm. The whole grade split into a variety of committees to plan every aspect of the Festival from start to finish and even designed and wrote a community cookbook. In the end, students produced an event that tested their understanding of local and healthy food and brought the school community together. Now, the 6th grade is reading and dissecting Michael Pollan’s, Omnivore’s Dilemma, to see how it impacts their food and eating choices.

7th Grade: What is Good Food?
Food and food culture are a big deal at the Denver Green School and the 7th graders are spending the entire year with an in-depth exploration of both. Students have had the opportunity to research the quality of foods they like to eat, including both guilty pleasures and healthy alternatives. The students are beginning to question what makes “good” food by considering many factors that contribute to that label, such as taste, quality, cost, locality, nutrition, and processing.

Toward the end of this school year, the 7th graders plan to utilize their deeper understanding of food to create a business plan for their own healthy snack alternative. This multi-part unit has successfully integrated math, literacy, science, and social studies skills with our EFS standards.

Early Childhood Education (ECE): Appreciation & Advocacy
The ECE students – 4 and 5 years old – have been learning about the concepts of advocacy. Over many weeks, the class has had numerous discussions about what advocacy is, and why it is important. Most recently, these students have begun a study of advocacy, learning to advocate both for himself or herself and for someone else. This part of the unit is tied into a developing understanding of individual rights and responsibilities. The class is currently working on writing and illustrating a book about the rights of children and their healthy commons.
Denver Green School Water Consumption, 2005 through 2011
Units are gallons.
Consumption data was bimonthly until July 2009, when it became monthly data.

<table>
<thead>
<tr>
<th>Year</th>
<th>Address</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>Annual Use</th>
<th>Estimated Annual Indoor Use</th>
<th>Estimated Annual Outdoor Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>6700 E VIRGINIA AVE</td>
<td>19,000</td>
<td>23,000</td>
<td>24,000</td>
<td>31,000</td>
<td>171,000</td>
<td>537,000</td>
<td>418,000</td>
<td>533,000</td>
<td>519,000</td>
<td>129,000</td>
<td>26,000</td>
<td>26,000</td>
<td>2,456,000</td>
<td>252,000</td>
<td>2,204,000</td>
</tr>
<tr>
<td>2010</td>
<td>6700 E VIRGINIA AVE</td>
<td>1,000</td>
<td>6,000</td>
<td>0</td>
<td>39,000</td>
<td>57,000</td>
<td>606,000</td>
<td>772,000</td>
<td>768,000</td>
<td>701,000</td>
<td>454,000</td>
<td>26,000</td>
<td>20,000</td>
<td>3,450,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2009</td>
<td>6700 E VIRGINIA AVE</td>
<td>8,000</td>
<td>171,000</td>
<td>0</td>
<td>1,180,000</td>
<td>690,000</td>
<td>582,000</td>
<td>691,000</td>
<td>352,000</td>
<td>1,000</td>
<td>0</td>
<td>3,675,000</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>6700 E VIRGINIA AVE</td>
<td>66,000</td>
<td>73,000</td>
<td>653,000</td>
<td>2,255,000</td>
<td>1,763,000</td>
<td>10,000</td>
<td>4,820,000</td>
<td>60,000</td>
<td>4,760,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>6700 E VIRGINIA AVE</td>
<td>50,000</td>
<td>81,000</td>
<td>812,000</td>
<td>1,728,000</td>
<td>1,446,000</td>
<td>98,000</td>
<td>4,213,000</td>
<td>300,000</td>
<td>3,913,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>6700 E VIRGINIA AVE</td>
<td>61,000</td>
<td>82,000</td>
<td>1,079,000</td>
<td>1,471,000</td>
<td>1,134,000</td>
<td>67,000</td>
<td>3,984,000</td>
<td>366,000</td>
<td>3,528,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>6700 E VIRGINIA AVE</td>
<td>67,000</td>
<td>81,000</td>
<td>143,000</td>
<td>1,278,000</td>
<td>1,629,000</td>
<td>97,000</td>
<td>3,295,000</td>
<td>402,000</td>
<td>2,893,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Denver Green School Water Use in 2011

Month in 2011
Water consumption data of other elementary schools, 2010 through 2011
Units are gallons.
For comparison purposes.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Use</th>
<th>Estimated Annual Indoor Use</th>
<th>Estimated Annual Outdoor Use</th>
<th>Estimated Annual Indoor Use per Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2,559,000</td>
<td>744,000</td>
<td>1,815,000</td>
<td>1,600</td>
</tr>
<tr>
<td>2010</td>
<td>2,284,000</td>
<td>778,000</td>
<td>1,506,000</td>
<td>1,800</td>
</tr>
</tbody>
</table>
Core Values

Engage with our community as a library for learning and study how to reduce carbon footprint.

Community

High Expectations

Shared Leadership

Relevance

Stewardship

Engagement

Your Child will benefit from:

Community Garden and other learning Outside the Classroom Projects

Real World Problem Solving

Small School Environment

Individualized Learning Plans

Seeding the Future

Core academic classes such as Reading, Math, Science and History will be taught using project-based and individualized learning techniques.

We use research-based curricula that is aligned with our values to meet and exceed Colorado Standards and our Education for Sustainability Standards.

Our Mission

In partnership with our diverse urban community, Denver Green School provides a hands-on, brain-on experience that includes all students, staff, families and community preparing all learners to lead the way toward a sustainable bright and green future.

Our Vision

As a national pioneer for real-world learning, the Denver Green School offers flexibility in the direct instruction and curriculum and instruction where diverse learners of all ages achieve a high level academically.
FAQ

DGS is a Charter School. We are a neighborhood school. We have a lot of freedoms that a charter school has but we are a district school and report to the DPS board.

Is your school day longer? Our school day is longer. We start at 8:00 AM and end at 3:45 PM. On Fridays, we have early release days and school ends at 12:45.

Does DGS provide before and after school programming? Yes, we partner with Kaleidoscope corner and have a small fee based after school program. We also have a Friday Enrichment program of field trips.

Do you accept transfer students? Yes, we accept transfer students and evaluate the applications in the order received.

What grade will you have for 2012-2013? We will have ECE-4th grades in 2012-2013 and add 5th grade for the 2013-2014 school year.
Applicant: Denver Green School

Part I: Proposal Introduction
No Points

Part II: Pillar I: Environmental Impact and Energy Efficiency 33/35
Part III: Pillar II: Healthy School Environments 30/30
Part IV: Pillar III: Environmental and Sustainability Education 37/40
Total: 100/105

GENERAL COMMENTS
Strengths:
• Have reduced electrical energy 47% in 2011 – via solar panels, sola-tubes, lighting reduction policy.
• Have cut water use by half in last 3 years – with 6th graders trying to find more savings via an audit.
• 63% of waste us recycled or composted – 1st graders identify “Terra Cycle” waste to sell.
• 66% of students and 25% of faculty use alternative transportation modes.
• Actively engage students in finding and implementing additional savings/reductions.
• Have an IPM Plan, manage for high indoor air quality, engage kids in active use of recess; grow and provide veggies to cafeteria; Healthy school environment included in ongoing school program.
• Have numerous partnerships, plus standards-based curriculum planning & learning opportunities throughout the curriculum, with civic engagement, an assessment system to enable students to demonstrate environmental & sustainability concepts & curricular programs and connections to career & college opportunities in environmental & sustainability.

Weaknesses:
• Did not state whether they are aiming for “zero-waste”.
• Consider creating an anti-idling policy & a safe pedestrian program.
• 47% reduction is only in electricity- what other sources of energy are there & what reductions there?
• Opportunities for improvement include: consider purchasing CF paper; continuing to strive for more use of alternative transportation; implementing asthma management & UV skin-protection programs.

Final Review:
• Overall review group top recommendation
• School of Innovation
• Farm to table program – cafeteria completely supplied by farm and garden
• Curriculum
• Total school/community involvement

Recommendation: Nominate X