



## 2013-2014 School Nominee Presentation Form

### PART I - ELIGIBILITY CERTIFICATION

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#### 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 to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes one or more of grades Pre-K-12. (Schools on the same campus with one principal, even a Pre-K-12 school, must apply as an entire school.)
2. The school has been evaluated and selected from among schools 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2013

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[ ] Charter [ ] Title I [ ] Magnet [ ] Private [ ] Independent

Name of Principal **Mr. Michael Norris**

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

Official School Name **Larkspur Elementary School**

(As it should appear on an award)

School

Mailing Address **1103 West Perry Park Avenue**

(If address is P.O. Box, also include street address.)

<b>Larkspur</b>	<b>CO</b>	<b>80118</b>
City	State	Zip

County **Douglas** State School Code Number\* **4980**

Telephone **303-387-5375** Fax **303-387-5376**

Web site/URL **[schools.dcsdk12.org/le](http://schools.dcsdk12.org/le)** E-mail **[mknorris@dcsdk12.org](mailto:mknorris@dcsdk12.org)**

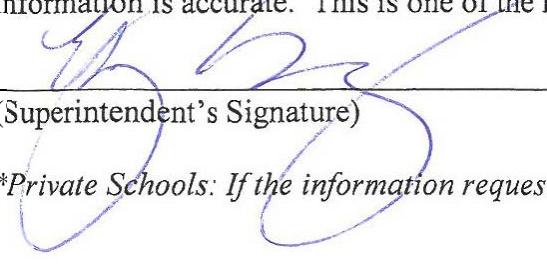
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

 Date **1/15/14**  
(Principal's Signature)

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

District Name\* **Douglas County School** Tel. **303-387-0100**

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

 Date **1/22/14**  
(Superintendent's Signature)

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

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

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### **Instructions to School Principal**

Provide a concise and coherent "snapshot" that describes how your school 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 school worthy of the title U.S. Department of Education Green Ribbon School.

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

### **Instructions to Nominating Authority**

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, 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 school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

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



(Nominating Authority's Signature)

Date 1-30-14

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 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

## 2013-2014

### PART IA: SCHOOL CONTACT INFORMATION

School Name: Larkspur Elementary

District Name: Douglas County School District

Street Address: 1103 West Perry Park Avenue Larkspur, CO 80118

Website: <https://sites.google.com/a/dcsdk12.org/larkspur/>

Facebook page: N/A

Principal Name: Michael Norris

Principal Email Address: Michael.norris@dcsdk12.org

Phone Number: 303-387-5375

Principal Signature\*: Michael Norris

Lead Applicant Name (if different): Chantel Estes

Lead Applicant Email: Chantel.estes@dcsdk12.org

Phone Number: 303-387-5375

Lead Applicant Signature\*: Chantel Estes

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

### School Demographics

<b>Level</b> <input type="checkbox"/> Early Learning Center <input checked="" type="checkbox"/> Elementary (PK - 5 or 6) <input type="checkbox"/> K - 8 <input type="checkbox"/> Middle (6 - 8 or 9) <input type="checkbox"/> High (9 or 10 - 12)	<b>School Type</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private/Independent <input type="checkbox"/> Charter <input type="checkbox"/> Magnet	<b>How would you describe your school?</b> <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input checked="" type="checkbox"/> Rural	<b>Is your school in one of the largest 50 districts in the nation?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
			<b>Total Enrolled:</b> 274
<b>Does your school serve 40% or more students from disadvantaged households?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>% receiving FRPL:</b> 8% <b>% limited English proficient:</b> 5% <b>Other measures</b> _____	
		<b>Graduation rate:</b> N/A <b>Attendance rate:</b> 95%	

## PART II: APPLICATION NARRATIVE

Larkspur Elementary is a k-6 school situated on 9 acres in beautiful Larkspur, Colorado. This Douglas County School, has received district innovation funds to implement an Environment-based Education program over the next three years. The program, Environment as an Integrating Context or EIC, is a nationally recognized vehicle for improving student learning through engaging students in community-based investigations, which lead to student-led service learning projects. EIC learning uses an integrated approach as students learn about the interactions between natural and social systems. Investigations develop knowledge, understanding, and appreciation for the environment—community and natural surroundings. This school-wide initiative has led students to develop thinking and interpersonal abilities, and has caused them to take action to create sustainable change in our community.

As we have learned how we as a social system are affecting the natural system, our students and staff have made considerable change in reducing landfill and energy waste. This year we have instituted a large scale recycling and composting program. We do daily measurements of # of bags of recycling and pounds of compost we are diverting. In our lunchroom alone, we have reduced our landfill waste stream by 47%. In addition, we have started a community e-waste and textile-recycling program. Not only are we reducing our communities landfill waste stream by providing this service, we are also earning money with everything we recycle. In addition, we are part of 4 Terra-Cycle Brigades, which take non-recyclables and repurposes them. We have installed a water bottle re-fill station that keeps our students hydrated as they go outside and has diverted over 2,000 bottles from the landfill. Our student energy team performs energy audits on a daily basis to ensure we are turning off lights when they are not being used. These audits along with delamping have reduced our energy usage by 24% over the past 3 years. As a result, we have earned district paid incentive money totaling around \$20,000.

LES takes pride in its longstanding garden initiatives that teach students about nutritious organically grown foods. Over the past 10 years, parents, teachers and students have built 2 outdoor gardens where students have planted, grown and harvested vegetables. Our district chef has come to show students how to take food from garden to table and Nutrition Services has provided information and contests to challenge kids to build a colorful plate full of vegetables. This year, we have formed a new partnership with Juice Plus/Tower Garden. This partnership has allowed us to grow vegetables indoors during the winter months using vertical aeroponic gardens. Students are learning about this green technology, which only takes 10% of the water that a typical garden requires. Our fourth graders are learning about alternative forms of gardening as they plan, design, and build their own aquaponic gardens to learn how systems interact. LES also provides students opportunities to learn about the importance of being active. We offer before and after school classes that include running club, garden club, basketball, volleyball, and various cooking classes. In addition, we offer students the opportunity to take part in sports camp during our holiday breaks. Douglas County offers teachers the opportunity to take part in wellness challenges in which they can win prizes for working out, eating healthy, and getting wellness check-ups. Our sixth graders are creating a trail system on our campus, which will be used to connect our outdoor learning spaces and act as a community trail for the fitness minded.

Environment and sustainability education is at the forefront of our EIC learning experiences. Students use the environment as they learn about system interaction then create a plan to make sustainable change during their service-learning project. Teachers have ongoing training on how to engage their students with the environment and with writing integrated units of study.

Larkspur Elementary is committed to providing an education where "No Student is Left Inside." We have seen first hand the benefits of using our local natural environment as a context in which students learn reading, writing, math, social studies and science content. Students are learning how to make healthy food choices and be responsible users of our natural resources. Larkspur Elementary is changing education as we know it by breaking down the walls of the classroom and getting kids outside. LES is worthy to be called a U.S. Department of Education Green Ribbon School.

#### **Green School Program and Awards (Cross-Cutting Questions)**

1. Is your school 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?

(X) Yes ( ) No Program(s) and level(s) achieved: **District Green Ribbon, 2012-13. Environment as an Integrating Context (EIC), whole-school integration 2013. Green Up Our Schools, participant. EcoSchools USA, Silver Award Recognition, working toward Green Flag. Healthy Schools Initiative, participant. DougCo Schools Energy Incentive Program, 3-year incentive winner.**

2. Has your school, staff or student body received any awards for facilities, health or environment?

(X) Yes ( ) No Award(s) and year(s): **National Wildlife Federation, Certified Wildlife Habitat, 2013. Waste Management/Keep America Beautiful Waste Reduction Grant, 2013. Red Apple Recycling Grant, 2013. Healthy School Initiative Grant, 2011-present. Kaiser Permanente Colorado Thriving Schools Mini-Grant recipient.**

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

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#### **Element IA: Reduced or Eliminated Greenhouse Gas Emissions**

1. Can your school demonstrate a reduction in Greenhouse Gas emissions?

(X) Yes ( ) No Percentage reduction: **36%** Over (m/yy - m/yy): **7/10-6/13**

Initial GHG emissions rate (MT eCO<sub>2</sub>/person): **2.374 MT eCO<sub>2</sub>/person**

Final GHG emissions rate (MT eCO<sub>2</sub>/person): **1.513 MT eCO<sub>2</sub>/person**

Offsets: **De-lamping, Student Energy Management, updating controls and building optimization.**

How did you calculate the reduction? **EPA Carbon Calculator**

2. Do you track resource use in EPA ENERGY STAR Portfolio Manager? (X) Yes ( ) No

If yes, what is your score? **46** If score is above a 75, have you applied for and received ENERGY STAR certification? ( ) Yes (X) No Year: **N/A Larkspur Elementary had an energy star score of 11 in 2009 due to its age and the district's inability to replace less efficient equipment with pricey alternatives. So the improvement of 35 points to the score in the past 5 years has primarily been due to energy management efforts by our student led energy team.**

3. Has your school reduced its total non-transportation energy use from an initial baseline? (X) Yes ( ) No

Current energy usage (kBtu/student/year): **4272 kBtu/student/year**

Current energy usage (kBtu/sq. ft./year): **80.04 kBtu/sf/year**

Percentage reduction: **24% over (m/yy - mm/yy): 7/07-6/13**

How did you document this reduction? **Actual utility bills data from providers showing current usage versus baseline.**

4. What percentage of your school's energy is obtained from:

On-site renewable energy generation: **0%** Type: **N/A**

Purchased renewable energy: **0%** Type: **N/A**

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: **No**

5. In what year was your school originally constructed? **1972**

What is the total building area of your school? **32,215 square feet**

6. Has your school constructed or renovated building(s) in the past ten years? ( ) Yes (**X**) No

For new building(s): Percentage building area that meets green building standards: **N/A**

Certification and year received: **N/A** Total constructed area: **N/A**

For renovated building(s): Percentage of the building area that meets green building standards:

\_\_\_\_\_ Certification and year: **N/A** Total renovated area: **N/A**

#### **Element IB: Improved Water Quality, Efficiency, and Conservation**

7. Can you demonstrate a reduction in your school's total water consumption from an initial baseline?

Average Baseline water use (gallons per occupant): **1362 gallons per occupant**

Current water use (gallons per occupant): **906 gallons per occupant**

Percentage reduction in domestic water use: **35%**

Percentage reduction in irrigation water use: **61%**

Time period measured (mm/yyyy - mm/yyyy): **7/2010-6/2013**

How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, utility bills, school district reports)?: **Utility Bills**

8. Percentage of your landscaping considered water-efficient and/or regionally appropriate: **90%+**

Types of plants used and location: **Synthetic turf, native plants, native grasses. Landscaping was strategically placed to reduce erosion and to help with storm water run-off. Students use our new landscape as a means to learn about native plants and compare it to our existing landscape to identify noxious and invasive plants.**

9. Describe alternate water sources used for irrigation. (50 words max)

**Collecting rain run-off is not allowed in our area. Instead, we use on-site gauges and rain cans to meter rain fall. Installed weather stations give district personnel real-time data that allows us to irrigate based on evaporation/transpiration rates. DCSD implemented several maintenance policies to reduce consumption and need.**

10. Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (50 words max)

**Recently, improvements were made to our landscape. Improvements included mimicking natural systems by adding native plants and shrubs to help manage runoff and erosion and to add 2 additional outdoor learning spaces. We replaced 2,000 square feet of asphalt with synthetic turf that was being thrown away by a local high school.**

11. Our school's drinking water comes from: (**X**) Municipal water source ( ) Well on school property ( ) Other:

12. Describe how the water source is protected from potential contaminants. (50 words max)

**Our municipal water district implements stringent water quality standards for all of their customers, contaminant protection is provided through this local municipality. DCSD tests the water quality monthly. Also, we have external companies test our water supplies regularly, and on request.**

13. Describe the program you have in place to control lead in drinking water. (50 words max)

**Our drinking water is provided through a municipal jurisdiction. This jurisdiction must meet all state and federal codes and regulations regarding safe drinking water.**

14. What percentage of the school grounds are devoted to ecologically beneficial uses? (50 word max)

**90%+ As a school-wide initiative, we use all of our outdoor space as a classroom. Efforts include:**

**-2 school gardens/composting      -wetlands**

**-6 outdoor classrooms      -bat house**

**-Bluebird monitoring      -rain gauge monitoring through COCORAHS**

**In addition, our 6<sup>th</sup> grade classes, are creating a trail system to connect all outdoor classrooms. This system will allow our community to access the learning spaces in a sustainable way and will include placards to identify vegetation as well as denoting distance travelled for the fitness minded patron.**

#### **Element IC: Reduced Waste Production**

15. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): **9 cubic yards**

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): **6 cubic yards**

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): **2 cubic yards**

Recycling Rate =  $((B + C) \div (A + B + C) \times 100)$ : **47%**

Monthly waste generated per person = (A/number of students and staff): **.03**

16. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? **100% of our paper is from the Sustainable Forestry Initiative.**

17. List the types and amounts of hazardous waste generated at your school:

Flammable liquids	Corrosive liquids	Toxics	Mercury	Other:
0%	0%	0%	0%	N/A

How is this measured? **Stericycle is our District's sole source provider who quantifies these amounts.**

How is hazardous waste disposal tracked? **Our District Environmental Manager tracks all hazardous waste removal and disposal with an online Google document.**

Describe other measures taken to reduce solid waste and eliminate hazardous waste. (100 word max)

**Solid waste reduction is a main focus for LES. We use durables in the lunchroom, measure and compost food waste from the front and back of house, and use Terra-cycle to collect 4 brigades worth of waste to upcycle. These efforts have cut our landfill waste in half. We work with Green Up Our Schools to further reduce our solid waste in the workroom and classrooms. Our printers default to double-sided copying and electronic communication has revolutionized how we do business. We have installed a water re-fill station, which calculates how many plastic bottles we have diverted from landfill.**

18. Which green cleaning custodial standard is used? **For daily cleaning supplies, our warehouse only stocks 100% green products. The 85% accounts for the strippers and some other products that do not have green alternatives.**

What percentage of all products is certified? **85%**

What specific third party certified green cleaning product standard does your school use? **A number of Diversey's chemical products are rigorously tested and certified by independent organizations such as Green Seal™, Environmental Choice, GreenGuard, EU Flower and Nordic Swan.**

#### **Element ID: Use of Alternative Transportation**

19. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? **98%** (Note if your school does not use school buses) **We do have buses.**

How is this data calculated? (50 word max) **Since Larkspur Elementary is situated in a rural community, 100% of our students either take the bus or car to school. Of the students that come in cars 98% of them have siblings/friends that ride with them. This leaves about 2% that ride less than 2 per car.**

20. Has your school implemented?

designated carpool parking stalls.

a well-publicized no idling policy that applies to all vehicles (including school buses).

Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.

Safe Pedestrian Routes to school or Safe Routes to School

Describe activities in your safe routes program: (50 word max)

**As part of Safe Routes to School, our transportation department has improved lighting, striping, and traffic flow. We have added paths and easy access trails to make our campus more accessible to walkers/hikers.**

21. Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word max)

**DCSD participated in the Air Quality Councils "Yellow Fleets for Blue Skies." They added particulate filters, diesel oxidation catalyst and re-gen systems for our bus fleet. They optimized routes and regionalized buses to increase efficiency reducing our fuel usage by 31%.**

22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word max)

**Larkspur values innovative approaches to support student learning and provide community services. Our Energy program is student-led, teaching students light metering and behavior management. We are an E-Cycling site for the community, collecting and recycling e-waste. We host a Little Red Schoolhouse that repurposes textiles to keep them out of the landfill. Our art teacher is transforming our art program committing to a "No Paper Purchase Policy." Instead he has implemented a re-use policy allowing kids to be creative, good stewards in a 21<sup>st</sup> century world. Students are putting water reduction attachments on each faucet in the school and at home.**

## Pillar II: Improve the Health and Wellness of Students and Staff

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### Element IIA: Integrated School Environmental Health Program

1. Describe your school's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspections, pest identification, monitoring, record-keeping, etc.: **The district grounds team is in charge of Larkspur's pest management efforts. They perform routine inspections and keep records by invoicing all services performed by contractors. Contractors are responsible pest identification and treatment. The only items on record for Larkspur campus pest management are 2 applications of spray for pine beetle and deep root watering for stressed trees during the drought.**
2. What is the volume of your annual pesticide use (gal/student/year)? **Approximately .01 gallon/student/year** Describe efforts to reduce use: **As a district we do not use any pesticides, but instead use herbicides. The use of pesticides will only be used if an outside contractor is required for pest mitigation ie. Pine Beetle control.**
3. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice. (100 word max each)

Our school prohibits smoking on campus and in public school buses. **District policy does not allow tobacco of any form on our premises nor in our vehicles, signage informs all visitors and staff of policy, and this is enforced across our District.**

Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. **DCSD requires all science purchases to be authorized by our Environmental Manager, and elemental mercury is no longer allowed. Any existing equipment which may contain mercury, is being removed over time, as needed or found.**

Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) **The fuel burning appliances are equipped with vent hoods that take any possible contaminants outside the building.**

Our school does not have any fuel burning combustion appliances

Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L. **DCSD tests all occupied spaces for radon. If any test shows results above 4.0 pCi/L, mitigation and abatement takes place immediately.**

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.

3. Describe how your school manages and controls student and staff exposure to chemicals (including pesticides) routinely used in the school. (100 word max)  
**All general use chemical access is restricted to a few staff members. Access to these chemicals is controlled through locked closets and storage containers. The chemicals we use are certified green cleaning chemicals that are safe to use in their respective environments. District standards verify what chemicals can be ordered and all supplies come through our warehouse.**

Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max) **DCSD and Larkspur are dedicated to providing a healthy school environment for all students and staff. We have many programs in place to support healthy environments including:**

- strongly filtered ventilation
- preventative maintenance
- chemical control
- mammal restrictions
- staff training on asthma triggers
- strong support from health experts
- strong abatement and mitigation program

6. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. (100 word max) **DCSD implements aggressive mitigation techniques to ensure healthy air quality for students and staff. As a district we are equipped to handle small to medium mold mediation efforts. When mold is identified, it is immediately removed and remediation is performed through the use of appropriate ventilation and humidity control and mold inhibiting materials. Air quality tests are then performed to ensure safe environments. For large-scale cases, outside companies are called to remediate.**

7. Our school has installed local exhaust systems for major airborne contaminant sources. ( )Yes (X)No

8. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100 word max) **DCSD has a rigorous preventative maintenance program and a highly trained in-house HVAC team that inspects and maintains all district equipment. We employ a semi-annual preventative maintenance schedule that follows a task list for each piece of equipment. Task lists include and document checking, cleaning, lubing, and filter changes.**

9. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100 word max) **Our building complies with local codes and meets ASHRAE guidelines.**

10. Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (200 word max) **Indoor Environmental Quality is handled by our district's Environmental Manager and Operations and Maintenance team. This team responds to any concern or complaint and tests the potentially impacted area. If any issue is discovered, we mitigate and abate the issue ourselves or if needed bring in a third party partner to rectify the problem.**

#### **Element IIB: Nutrition and Fitness**

11. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100 word max each)

[X] Our school participates in the USDA's HealthierUS School Challenge. Level and year: **Larkspur Elementary has been a part of the Healthy School Initiative for the past 2 years and has implemented 4 projects to improve student health.**

[X] Our school participates in a Farm to School program to use local, fresh food. **Nutrition Services believes in supporting local food sources. They feature a local crop once a month.**

[X] Our school has an on-site food garden. **Larkspur has 2 outside gardens. We are also using indoor aeroponic vertical gardens to teach students about year-round, non-soil gardening that yields high amounts of greens.**

[X] Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. **We have a garden club that meets regularly before/after school and during the summer to maintain 12 garden beds. Our District Chef has visited to show students how to use what they harvest in school lunches. Classes have adopted a garden bed where they will plant, maintain and harvest their own crops.**

[X] Our students spent 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.

[X] Health measures are integrated into assessments. **Our PE teacher uses fitness tests and PACER scores in assessing and setting goals for students.**

[X] At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). **100% of our students participate in the Sunwise Program. We have a UV Index Meter posted by the front door to report daily UV categories and we have sunscreen dispensers at the front and back doors of the building.**

[X] Food purchased by our school is certified as "environmentally preferable"

Percentage: \_\_\_\_\_ Type: **Nutrition Services offers a daily harvest bar (salad bar) for all students and staff. They use resources from [www.thelunchbox.org](http://www.thelunchbox.org) to teach kids how to create a rainbow on their plates and have posted salad bar etiquette instructing kids to try new foods and to take only what they can eat. As of Nov. 1, 2013 Nutrition Services is also providing students the option of Organic Milk. In addition, they are using environmentally preferable cooking paper and cleaning supplies.**

12. Describe the type of outdoor education, exercise and recreation available. (100 word max) **Larkspur Elementary is implementing a new program called Environment as an Integrating Context (EIC). Our program requires students to learn outside on a daily basis investigating interactions between natural and social systems and then performing service-learning projects to improve our community. Sixth grade is building a trail around our school to connect our 8 outdoor learning spaces and to provide a sustainable exercise/education trail for our community. We are also partnering with the DCSD Outdoor Ed Center to provide all of our students' K-6 opportunities to explore and learn outside. Our field is available for school and community events, and PTO has hosted an annual 5K run for the past five years.**

13. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (100 word max)

**LES and our parent community value opportunities for students to learn about nutrition and to take part in fitness activities. During our holiday breaks, we offer a tuition-based sports camp. Not only are kids able to be active, it is also a funding source for LES since we get a portion of registration fees. During the year, we**

offer before/after school activities including garden club, running club, volleyball, basketball, and cooking club for preparing nutritious snacks. Our PTO provides assemblies throughout the year, many through Kaiser-Permanente, including "5210 Mainstreet", which teaches about good nutrition and exercise. Sixth grade planned, raised funds for, and built a Gaga Ball pit on our campus to engage students in team building and active play during recess.

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

14. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? (X) Yes ( ) No

If yes, describe the health-related initiatives or approaches used by the school: **LES takes part in S'Cool moves and teachers implement brain breaks in their classrooms. Students participate in daily restorative groups during their classroom meetings to build community and resolve conflict. We have partnered with Spark Counseling who provides a counselor to lead boys and girls circles for students in grades 4-6. These activities encourage students to openly discuss bullying, safety, and other health matters. Teachers use materials from "The Great Body Shoppe" program to integrate into other content areas. With the addition of outside learning at our school, students have received instruction on the importance of hydration, sun safety, and the local UV index.**

15. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety? (X) Yes ( ) No If yes, describe these partnerships: **In 1988, the Douglas County Sheriff's Office partnered with the Douglas County School District to create a School Resource Officer (SRO) program to positively impact the relationship between law enforcement and the young people of the community. We have grown this partnership into the School Marshal program, where an officer visits every building in the district twice a day. These officers not only build rapport with our students and families by visiting and eating lunch with them, they also ensure our buildings are safe. The Larkspur Fire Department teaches students about fire safety. Our PE teacher works with the American Heart Association through Jump Rope for Heart to build awareness of heart disease. LES works with the Chamber of Commerce and a parent-run 501c3 to generate donations for needy families in the form of daily snacks, warm clothes, and holiday meals. We are working with Juice Plus to provide us with hydroponic gardens. These gardens afford our students the opportunity to grow, harvest and eat nutritious foods. Juice Plus has also provided us a funding opportunity by giving us proceeds from every hydroponic garden we sell. The Colorado Agricultural Leadership Foundation has partnered with LES to provide K-4<sup>th</sup> grade students opportunities to learn about local agriculture and its impact on natural and social systems. Our first and second grade classes have partnered with Colorado School of Mines as they work with Ranger Pam to teach students how social systems interact with natural systems.**

16. Does your school have a school nurse and/or a school-based health center? (X) Yes ( ) No

17. Describe your school's efforts to support student mental health and school climate (e.g., anti-bullying programs, peer counseling, etc.): **At Larkspur Elementary we are proactive when it comes to student's mental health. As a school, we learn about Core Virtues such as responsibility, respect, perseverance, generosity, self-discipline, compassion, and honesty in tech class. Students use tech tools to create letters on each virtue, and then electronically share their documents with others in our school. Students also take part in morning meetings in their classrooms on a daily basis. These meetings build community among students and give them the opportunity to work through community problems and emotional turmoil that may arise. We provide student leadership opportunities through our Student Council, Energy Council, Outdoor Minions, and Apple Corps to give them a chance to develop leadership**

skills and serve our school community. Our school psychologist provides targeted friendship groups for students struggling with problems at home like divorce or loss in the family. Our PTO sponsors assemblies throughout the year to support student mental health, such as the Kaiser assembly on cyber-bullying.

### Pillar III: Effective Environmental and Sustainability Education

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

1. Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.

[X] Our school has an environmental or sustainability literacy requirement. (200 word max)

**Environmental literacy and sustainable practices are an integral part of our environment-based program. Students build background knowledge by learning the science behind a natural system, do a needs-assessment to determine community need, then they work to develop a service-learning project to make sustainable change. Our program includes school-wide initiatives around reducing solid-waste, reducing energy consumption, and creating sustainable change. All of this thinking is pervasive and evident in all we do.**

[X] Environmental and sustainability concepts are integrated throughout the curriculum. (200 word max) **As mentioned before, environmental and sustainability concepts are integrated into our community-based investigations. Since students are learning about the interaction of natural and social systems these concepts are naturally covered.**

[X] Environmental and sustainability concepts are integrated into assessments. (200 word max)

**Assessments are created to measure student's growth toward world-class outcomes and supporting questions underlying community-based investigations. Teachers develop these assessments to measure growth and achievement. Since environmental and sustainability concepts are integrated into community-based investigations, these concepts are integrated into assessments.**

[ ] Students evidence high levels of proficiency in these assessments. (100 word max)

**Although these assessments are being given, we do not yet have data to provide evidence of proficiency.**

[X] Professional development in environmental and sustainability education are provided to all teachers. (200 word max) **LES is adopting an Environment-based Education program called Environment as an Integrating Context (EIC). The implementation will be over a three-year period. All of our teachers have undergone training by our EIC consultants. The program includes an initial 4-day training where our staff learned about using the environment as a means to integrate all content, mapping of our local natural and social systems, and an introduction to the context in which we will be engaging our students. Our consultants continue to support us throughout the year with ongoing visits to develop unit plans and to continually provide us opportunities to develop our understanding of EIC. In addition to our consultants, we have two experts on staff who provide training around the student-led inquiry process and engaging kids outside. Staff members have attended the North American Association of Environmental Education conference for the past 2 years and have brought back resources, activities and a nationwide network of colleagues that have helped us through implementing many environmental initiatives.**

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

2. For schools serving grades 9-12, provide:

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: **N/A** Percentage scoring a 3 or higher: **N/A**

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200 word max)

**LES provides students with STEM opportunities in their classrooms, school-wide and during the summer. In classrooms, STEM opportunities are integrated into our Environmental Units. Grades 1-2 will be learning how to determine water health by testing pH, dissolved oxygen, and collecting macro-invertebrates. They will then test water samples from our wetland to determine the health and make a plan of action to support a healthy habitat. Fourth graders are using the Engineering Design process to learn about aquaponic systems. They are partnering with a local high school AP biology class to plan, design, and build their own aquaponic system where they will learn about symbiotic relationships. In 6<sup>th</sup> grade, students planned, designed and built ecosystems to measure growth of plants, pH of water, and interactions between insects and plants. School-wide, students will be working with community members to perform a Bio Blitz documenting all living things on our campus. Students will use iPod Touches to take pictures and document all specimens they find in Project Noah. This summer, LES will be hosting Camp Invention, a nationally recognized elementary enrichment program. This science camp gives students a chance to explore science, technology and their own innate creativity, inventiveness and entrepreneurial spirit.**

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)

**We pride ourselves in preparing students to be responsible resource users. We have school-wide efforts around recycling, composting and energy management and are integrating these ideas to educate how green technologies are innovating change for the future. Recycling has been a great opportunity for us to teach students how to reduce landfill waste and how green technologies are taking recycled materials and using them to make new products. Not only are we recycling recyclable material, we have found sources to recycle non-recyclables, textiles, and e-waste. We are part of four brigades through Terra-cycle, who take our non-recyclables and turn them into new products. We also host a Little Red School house through Red Apple Recycling, which takes community donations of textiles to re-purpose. We send our e-waste to CFK to keep it out of the landfill. Not only are students learning existing technologies and how to use them in sustainable ways, we are bringing in green technologies so students can learn what is being innovated for the future. Our students are using aeroponic Tower Gardens to grow healthy foods in a controlled indoor environment using only 10% of the water typical gardens use. Students compare outdoor gardening to an alternative indoor approach finding pros and cons and speculate how this may affect the future job market.**

**Element IIIC: Development and application of civic knowledge and skills**

5. Describe students' civic/community engagement projects integrating environment and sustainability topics. (200 word max)

**Civic and community engagement is the cornerstone of our EIC model. Not only are students taking on integrated service learning projects in their classrooms, we have also taken on whole-school community support/engagement projects. Being part of a small community, LES has taken on the role as community center by providing certain services not provided in our town. A former student, and Girl Scout, held a community e-cycling event where community members were invited to drop off e-waste for us to send into CFK. Not only is this providing a much-needed service in our community, LES benefits by earning money for**

these recyclables. In the same way, we offer textile recycling and 4 terra-cycle brigades. We are also working to build community by including residents in citizen science projects our students are working on in class. Our students are also growing compassion for people outside our community as we raise funds for the recent flood victims in our state.

6. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max)  
**Every class is required to be outside on a daily basis to learn how natural systems and social systems interact. Here is a list of outdoor learning experiences by grade level:**

**Kindergarten:** After learning how to care for the trees on our campus, students decided to transplant some overcrowded trees in places they could thrive.

**First and Second Grade:** Students observed our wetland over a period of time, determined it's health, then created a plan to clean and maintain it.

**Third Grade:** After learning about natural resources in our area, third graders studied different ground materials on our campus to see which would be best for 6<sup>th</sup> grade to use in preparing grounds for trail building.

**Fourth Grade:** Students worked with Colorado Agriculture Leadership Foundation to learn about sustainable practices in maintaining land resources then served our community by gleaning fields to help a farmer prepare for planting season.

**Fifth Grade:** Students used our grounds to learn about erosion then worked with the town of Larkspur to improve erosion problems on our campus and in the community.

**Sixth Grade:** After working with POST to learn about trail building/maintenance, students built a community trail on our campus to connect our outdoor learning spaces.

7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200 word max)

At LES we are fortunate to have 6 outdoor classrooms, 2 gardens, and about 9 acres of grounds for our students to explore. We use this space on a daily basis to engage students in integrated lessons around the interaction of natural and social systems. We have also partnered with the Douglas County Outdoor Education Center located just down the road. The Center's grounds have given our students an additional 99 acres to explore science topics like atmosphere, hydrosphere, geosphere, biosphere and "sociosphere," our social system. Students have visited other sites to develop learning around their area of study. For example, third grade visited Fruition Farm, owned by a local restaurant, to learn about the ingenuity of restaurant owners who use local sources to grow organic produce and make Colorado's first sheep-milk cheese. This year we used our gardens as a teaching tool for students to understand the process from seed to table. Last year students planned and planted a "pizza" garden. This year they harvested, washed and sorted all produce from the garden. Our district chef, Chef Jason, then spent the day with us making salad and building pizzas with these nutritious vegetables. Students were able to see the whole process and to sample what they had grown.

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (200 word max)

**Partnerships allow students to make real-world connections between classroom learning and authentic practice. Our EIC Coordinator develops partnerships with community businesses, organizations and non-profits based on school needs. These partnerships are providing funding, knowledge, and community connections. Some include:**

**Colorado Agricultural Leadership Foundation (CALF):** Building teachers and students knowledge around local farming/agricultural practice. Assisting teachers in forming a network of farms to visit, offering k-4 grade students Lowell Ranch.

**Parks, Open Space, Trails (POST):** Works with sixth grade to build knowledge on building and maintaining trails. Provides service-learning opportunities. Provides resources for trail building and creates a network of community resources.

**Colorado School of Mines:** Provides a resource in Ranger Pam who visits to teach students about natural and social systems.

**Green Up Our Schools:** Provides funds, written resources and support to reduce solid waste school wide.

**Juice Plus+ and Tower Garden:** Provides Aeroponic Gardens, resources to understand hydroponics and aeroponics, and funding source for LES.

**Waste Management Keep America Beautiful:** Grant funds to bolster our composting and gardening programs.

**Douglas County Outdoor Education Center:** Provides facility and resources to engage students outside.

**Red Apple Recycling, Terra-cycle, Cartridges for Kids:** Organizations provide community with recycling options and are funding sources for LES.

9. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (200 word max)

With autonomy provided by our school district, our school has worked to develop an innovative and engaging program. In collaboration with the State Education and Environment Roundtable (SEER), we are in the first year of a three-year implementation of the "Environment as the Integrating Context" (EIC) model. To date, we have worked to develop units of instruction that integrate multiple content areas, including art, technology, and music built around the environmental as a context. We have developed many connections with community resources. In the future, we will seek out more ways to extend our program to preschool-aged students. We will also be looking for ways to provide our sixth grade students with a full-time, outdoor immersion-type program, modeled after similar and highly successful programs in public K-12 settings.

## 10. Photos



Part of Larkspur's Environment-Based Program includes a community-based investigation, which leads to a service learning project. Kindergarten is planting trees, first and second are cleaning our wetland, third and fourth are taking on indoor and outdoor garden projects, and fifth and sixth grade are tackling erosion mitigation by building a trail to connect our outdoor classrooms on our campus. These projects not only provide students with opportunities to give back and build a sense of community, but have also proven to get kids active, to teach them healthy habits, and to learn basic tool handling skills.



Students spend time outside on a daily basis. Kindergarten is learning about the trees on our campus, determining what they need to thrive and how as a social system we can best care for them. Our music teacher takes students outside to draw sound maps, determining which sounds come from natural and social systems, and later uses them to study timbre in music class. Fifth grade is taking part in an integrated unit of study in which they are investigating system interaction by first establishing a mathematical area, taking soil samples, listing living, non-living, once living and man-made items, then determining how natural and social systems interact in a larger system. Second grade discovered tracks in the snow. They brainstormed essential questions to answer to determine what animals left them. Teachers often take their classes outside for morning meetings. It's a time to build community and to discuss problems that arise in class and to implement restorative practices. Students use this new outdoor area that used to be asphalt. This once non-permeable surface has been replaced by synthetic turf that was being thrown away by a local high school.



Students harvested, sorted and washed veggies from our “Pizza Garden.” Our District Chef, Chef Jason, came out to show kids how to take what they grew to make salads and pizzas, which were served by the third grade class at lunch. Our garden initiative has grown over the past 10 years. We now have 2 outdoor gardens and 4 indoor aeroponic gardens to grow during winter months. In addition, fourth grade has started an integrated unit around systems thinking and symbiotic relationships as students are researching, designing and building an aquaponic garden system.



Sep 9 - Oct 4		M	T	W	Th	F	TOTAL
Landfill (#)		1	1 1/2	1 3/4	1	1 1/2	6 3/4
Kitchen (Kg)		15 7/8	14.5	12	12	10 1/8	97 23/8
Compost (kg)		28 5/8	28 5/8	28 5/8	28 5/8	28 5/8	210.2
Landfill (kg)		1 1/4	1 1/4	1 1/4	1 1/4	3	8 1/4
Compost (kg)		24 1/2	24 1/2	24 1/2	15 1/2	21 1/2	113 1/2
Landfill (long)		1 1/2	3/4	1	1/2	X	3 3/4
Compost (kg)		10 1/2	24 1/2	28 1/2	20 1/2	2	8
Landfill (long)		1 1/4	1 1/2	1 1/2	1 1/2	X	4 1/2
Compost (kg)		15 1/2	21 1/2	17 1/2	20 1/2	15 1/2	103 1/2



Larkspur has a school-wide initiative to reduce waste to help students and staff learn about being good stewards of our resources. We have a student-led energy management team, participate in E-cycling through Cartridges for Kids, host a textile community recycling bin, and have implemented recycling, composting and 3 terra-cycle brigades in the lunchroom. We chart the number of bags that go to landfill and weigh compost waste from the kitchen and lunchroom before putting it in our garden compost. As a result, LES has reduced lunchroom landfill waste by 47%