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Overview

The U.S. Department of Education's Green Ribbon Schools (ED-GRS) award is intended to recognize those schools that are taking a comprehensive approach to greening their schools. A comprehensive approach incorporates and integrates environmental learning with maximizing positive environmental and health impacts.

This is a two-step process. The first step is to complete and submit an application to the California Department of Education to be selected as a state nominee. If your school is selected as a state finalist, you will be asked to complete the second step of the process by providing additional information for the nominee package that will be forwarded to the U.S. Department of Education.

Schools will be evaluated based on their progress towards a wide variety of green benchmarks, including zero greenhouse gas emissions, food that is locally sourced and sustainable, and curriculum that ensures all students are environmentally and sustainability literate.

Four items are important to keep in mind as you consider applying to become a nominee:

These are ambitious goals and few, if any, schools are expected to have achieved all three, or even 100% of any one of the Pillars.

Schools demonstrating exemplary achievement in all three Pillars will receive the highest ranking.

It is important to demonstrate concrete achievement, using quantified measures, whenever possible.

If your school is being actively considered, additional documents supporting your answers may be requested.

Completing the Application

Selection is based on the National Green Ribbon Schools three Pillars:

Pillar I: Environmental Impact and Energy Efficiency

Pillar II: Healthy School Environments

Pillar III: Environmental and Sustainability Education

To complete the application, schools are asked to provide basic information and complete a series of questions, including some short narratives. You will need to collect extensive data about your school's facility, health and safety policies, food service, and environmental and sustainability curriculum and assessment. Some of the questions will require you to reach out to a variety of school and district personnel to gather quantifiable data. We hope you will assemble a team to work together to complete the application. This team may include physical plant directors, physical education directors, food services directors, curriculum directors, finance department representatives (for access to purchase orders, etc.) and teachers. A class or a group of students may also work with this team.

A [guide](#) is available on the CDE Website. You are encouraged to use this guide to develop responses before you begin this online application. Once you begin the application, you may save and return to it at any time until you hit the "submit" button.

As you will see in the application, the California Department of Education has broken down each Pillar into "Elements" in order to provide more detail and explanation for what is meant by each Pillar. Each Element then has a series of questions which will demonstrate the progress made in achieving these goals.

Timeline

December 22, 2011 - Application posted

February 17, 2012 - Applications submitted online by 5:00 pm PST to the California Department of Education (CDE)

March 22, 2012 - Four nominees submitted by CDE to the U.S. Department of Education

April 2012 - Earth Week - The U.S. Department of Education announces winners

May 2012 - U.S. Department of Education hosts national recognition award ceremony

Technical Assistance

For assistance in completing this application, please contact Kathleen Seabourne in the School Facilities and Transportation Services Division at 916-323-3926 or by e-mail at kseabour@cde.ca.gov.

Private Schools

Private schools are eligible to apply. These applications will be reviewed, scored, and nominated by the California Association of Private School Organizations (CAPSO). For assistance in completing this application, please contact the CAPSO representative, Paul Chapman at pchapman5@gmail.com.

The application is due no later than 5:00 pm PST on Friday, February 17, 2012.

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By submitting this electronic application, the school principal (or equivalent) below certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct. Private schools only certify to certifications 1 through 7 and 12 and in no case is a private school required to make any certifications with regard to the public school district in which it happens to be located.

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.)

The school achieves or comes close to achieving the goals of all three Green Ribbon Pillars: I) environmental impact and energy efficiency; II) healthy school environments; and III) environmental and sustainability education.

The school is in compliance with all applicable occupational safety and health standards and has no outstanding citations for violation of federal, state, or local occupational safety and health regulations and standards, nor has resolved such a case within the past year.

The school is in compliance with all applicable federal food and drug standards, including the Federal Food, Drug, and Cosmetic Act, and has no outstanding violations, nor has resolved such a case within the past year.

The school is in compliance with all applicable state and local codes and has no outstanding citations for state or local environmental, health, existing building, fire, plumbing, mechanical, or property maintenance codes, laws, or regulations, nor has resolved such a case within the past year.

The school has not been cited within the past three years for failure to meet federal, state, or local potable water quality standards.

The school has not been cited within the last three years for improper management of hazardous waste according to federal and state regulations.

Neither the applicant 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.

OCR has not issued a violation letter of findings to the public school district concluding that applicant 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 plan to remedy the violation.

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.

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.

The school and, in the case of a public school, the district meet applicable federal, state, tribal, and local health, environmental and safety requirements in law, regulations, and policy, and is willing to undergo U.S. Environmental Protection Agency (EPA) on-site verification.

The superintendent approves the submission of this application.

School Contact Information

County/District/School Code

19646911996438

District Name

Authorized by Lawndale Elementary School

County

Los Angeles

School Name

Environmental Charter High School

Mailing Address

16315 Grevillea Ave.

City

Lawndale

Zip Code

90260

School Website

www.echsonline.org

Principal/Head of School First Name

Jenni

Principal/Head of School Last Name

Taylor

Principal/Head of School E-mail Address

jenni_taylor@echsonline.org

Principal/Head of School Telephone Number

310-214-3400

Lead Applicant First Name (if different from Principal/Head of School)

Alison

Lead Applicant Last Name (if different from Principal/Head of School)

Diaz

Lead Applicant Title

Executive Director

Lead Applicant E-mail

alison@ecsonline.org

Lead Applicant Telephone Number

310-389-1990

If you would like to receive an email with your answers to this survey, please enter an email address here

rachel_ruffalo@echsonline.org

kseabourne

kseabour@cde.ca.gov

Level

High (9 or 10 - 12)

School Type

Charter

Total School Enrollment

481

How would you describe your school?

Urban

Total building area of the school

85,974.92

Year the school was built

1929

Year of modernization or renovation project(s)

1940, 2010, ongoing

Does the school have at least 40 percent of students from a disadvantaged background?

Yes

Number of full-time and part-time staff members in each of the categories below

| | Full-time | Part-time |
|---|-----------|-----------|
| Administrators | 2 | 2 |
| Classroom teachers | 27 | 1 |
| Physical education specialists | | 1 |
| Counselors | 1 | |
| Credentialed librarians | | 1 |
| Nurses | | |
| Psychologists | | |
| Technology/media specialists or technicians | | 1 |
| Paraprofessionals | 1 | |
| Campus resource officers | 3 | |
| Other staff | 1 | 4 |
| Total | 35 | 10 |

Application Outline:

| <u>Green Ribbon Pillars and Elements</u> | <u>Points</u> |
|---|-------------------|
| Cross-Cutting Questions: Participation in Green School Programs and/or awards for environmental and sustainability efforts, along with commitment of school organization | 5 points |
| <u>PILLAR I: Environmental Impact and Energy Efficiency: 30%</u> | |
| Element IA: Improved energy conservation/energy-efficient building(s) | 15 points |
| Element IB: Improved water quality, efficiency, and conservation | 5 points |
| Element IC: Reduced waste production and improved recycling and composting programs | 5 points |
| Element ID: Use of alternative transportation to, during, and from school | 5 points |
| <u>PILLAR II: Healthy School Environments: 30%</u> | |
| Element IIA: An integrated school environmental health program | 15 points |
| Element IIB: High standards of nutrition, fitness, and quantity of quality outdoor time | 15 points |
| <u>PILLAR III: Environmental and Sustainability Education: 35%</u> | |
| Element IIIA: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems | 20 points |
| Element IIIB: Use of the environment and sustainability to develop Science, Technology, Engineering, and Mathematics (STEM) content, knowledge, and thinking skills | 5 points |
| Element IIIC: Development and application of civic engagement knowledge and skills | 10 points |
| TOTAL | 100 points |

Q CC1: Is the school participating in a local, state, or nationally recognized green school program which asks benchmark progress in some fashion (for example, National Wildlife Federation Eco-Schools USA, Green Schools Alliance, Collaborative for High Performance Schools, or Project Learning Tree's Green Schools!)?

Yes

If yes, which program(s) is the school participating in and what level(s) have been achieved?

Green Schools Alliance, Eco Schools, Project Learning Tree (ECHS uses its curriculum), and ECHS is participating in a current national Green Schools network study. No level has been assigned to ECHS.

Q CC2: Has the school, staff, or student body received any awards for environmental or sustainability stewardship/action?

Yes

List the awards received and the years received.

California Department of Education's Service Learning Leader Award (2007); US Environmental Protection Agency Award (2007); Dissemination Grant from the California Dept of Education to disseminate our environmental programs and practices (2008); 2011 Wyland Foundation Earth Month Heroes (2 teachers honored); Pacific Crest Trail Association Partnership Award (2011); Green Technology, Educator of the Year Award. (Sara Laimon), 2009; Daughters of the American Revolution Conservation Award (2009)

Q CC3: Is there a forum provided where all representative stakeholders involved in the daily operation of the school (such as students, faculty, maintenance, and cafeteria staff) can meet to discuss, plan, and implement ongoing green

efforts?

Yes

If yes, describe: (Maximum 200 words)

ECHS operates a "Green Team" which is a committee made up of teachers and administrators, including the Director of Operations. Goals for the committee include planning future green initiatives, maintaining existing green learning features – cobb projects, green house, gardens, etc. – and to recommend green operational policies to the Board. The Green Team regularly invites the input of students and parents on particular issues that arise. For example, a group of students presented a proposal to the Green Team which ultimately resulted in the change of the school's lunch vendor to one whose practices helped to support the environmental mission of ECHS. The new vendor utilizes low-waste compostable packaging, locally grown food, and healthier food options. The ECS Board also maintains a facilities committee which includes board members, parents, teachers, and administrators. This committee makes recommendations to the board regarding the long-term facilities modernization plan which includes goals for LEED certification.

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Pillar I: Environmental Impact and Energy Efficiency

Buildings, grounds and operations: The school has made significant progress toward "net zero" environmental impact (zero carbon, solid waste, and hazardous waste footprints). Pillar I includes four main elements:

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

Element B: Improved water quality, efficiency, and conservation.

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

Element D: Expanded use of alternative transportation to, during, and from school, through active promotion of locally-available options and implementation of enabling projects and policies.

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

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QIA1. Is there an energy master plan in place?

Yes

QIA2: Has the school received EPA's ENERGY STAR certification?

No

If the school received the certification, note the year it was achieved and the score received:

If no, is the school eligible for certification?

Yes

QIA3: Has the total non-transportation energy use (i.e. electricity and temperature control) been reduced from an initial baseline?

Yes

Provide the following information:

Percentage of reduction : 24.5%

Measurement unit used (kBtu/square foot or kBtu/student) : kBtu/student

Time period measured (mm/yyyy - mm/yyyy) : 01/2008 - 01/2012

What documents can be provided to document this reduction (such as ENERGY STAR Portfolio Manager reports), if requested? : Energy Star Portfolio

Q1A4: What percentage of your school's energy is obtained from:

On-site renewable energy generation : 2.35%

Purchased renewable energy : 0%

Q1A5: If the school has been constructed and/or renovated in the past ten years, did the project meet one of the following green building rating systems? (Check all that apply.)

Leadership in Energy and Environmental Design (LEED)

Provide the following information:

What certification (if any) did the school receive and at what level (e.g. CHPS Verified, CHPS Verified Leader, CHPS Designed, LEED Certified, Silver, Gold, Platinum) : LEED CI (for renovated building & outdoor space)

What is the total constructed area? : 289 sq ft

What is the total renovated area? : 11,884 sq ft

Q1A6: Do existing buildings meet green building standards?

Yes

Provide the following information:

Has the school conducted CHPS Operations Report (ORC), achieved LEED Existing Buildings: Operations and Maintenance Certification, or other standards? : The school is currently working with CHPS on the Operation Report Card and have registered with LEED EB for certification. Certification process will be completed in one year for LEED EB.

Which certification (if any) did the school receive and at what level (e.g. Certified Silver, Gold, or Platinum) : Certification process in progress.

Q1A7: Can a reduction in the school's Greenhouse Gas (GHG) emissions be demonstrated?

Yes

Provide the following information:

Initial GHG emissions rate (MT eCO₂/person) : 33,798

Final GHG emissions rate (MT eCO₂/person) : 33,769

Percentage reduction : .09%

Time period measured (mm/yyyy - mm/yyyy) : 01/2011 - 01/2012

How was this reduction documented(e.g. the inventory module from Clean Air Cool Planet's Campus Carbon Calculator)? : EPA Household GHG Emission Calculator – EPA representative suggested using this calculator instead.

Q1A8: Is there a reduction and/or offset of greenhouse gas emissions from building energy use?

Yes

Provide the following information:

List offsets used : composting, trees, solar power, energy efficient products, natural gas and hybrid vehicles

Current total GHG emissions (MtCO₂e) : 642.3

Baseline total GHG emissions (MtCO₂e) : 769.5

Change from baseline : 127.2

Time period measured (mm/yyyy - mm/yyyy) : 01/2011 - 01/2012

Explain any offsets used : This reduction in emissions only captures one year's worth of reductions and does not take into account other reductions due to offsets that have been implemented over the past five years. In that time, ECHS has reduced its overall energy use by installing timers and sensors on electronic equipment so that less electricity is used during non-operational hours. ECHS uses solar to produce power, including for its greenhouse. ECHS has also planted trees which are

drought tolerant, have high carbon storage properties, and produce low biogenic volatile compound (BVOC) emissions. ECHS composts as much compostable waste for which it has the capacity. We have also held composting workshops for neighborhood residents and community organizations in order to reduce the amount of solid waste that gets hauled away to the landfill each week. ECHS also uses natural gas and hybrid vehicles which produce significantly less GHG emissions than their standard gasoline counterparts.

QIA9: Indicate which green building practices are being used ensure the building is energy efficient.

Our school building has been assessed using the Federal Guiding Principles Checklist in Portfolio Manager.

Our school has an energy and water efficient product purchasing and procurement policy in place.

Other, describe: office electronics and computers are connected to timers to reduce vampire power, outdoor lighting is either compact florescent or energy efficient, science classrooms have sensors that adjust to daylight, classrooms have occupancy light sensors, office building has radiant floor heating to warm building during winter

IA10: Describe any other indicators in the progress toward the elimination of GHG emissions (describe in detail and include metrics if available). (Maximum 200 words)

Efforts to directly reduce GHG emissions by providing alternatives to major GHG contributors include: • solar power panels • solar-powered green house • fruit tree forest • natural gas vehicles (30% reduction in GHG emissions, compared to gasoline vehicles) • campaign to encourage walking and bicycle riding to and from campus Efforts to reduce overall energy use (including transportation of products and waste) to contribute to the reduction in GHG emissions include the following: • recycling • com posting • low-waste/com postable lunch packaging • recycled concrete (urbanite) outdoor amphitheater • post-consumable paper • reusable water bottles • banning plastic bags and Styrofoam • double-sided printing • soy based toner for copy machines • electronics equipment are connected to timers to reduce vampire power • lights are connected to occupancy sensors so that the lights turn off when no one is in the room

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QIB1: Can a reduction in the school's total water consumption (measured in gallons/occupant) from an initial baseline be demonstrated?

No

Provide the following information:

Q1B2: Which of the following practices are employed to increase water efficiency and ensure quality? (Check all that apply)

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.

Our school has a smart irrigation system that adjusts watering time based on weather conditions.

Our school's landscaping is water-efficient and/or regionally appropriate.

Our school uses alternative water sources (ie. grey water, rainwater harvesting, etc.).

Taps, faucets, and drinking fountains 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)

Provide the following information about the school's landscaping

What percentage of the total landscaping is considered water-efficient or regionally appropriate? : 100%

What types of plants are used and where are they located? : The following plants are located throughout campus: Artemision, Mugwort, Mexican flannel bush, Deer grass, Giant coryopsis, Island tree mallow, Cholla cactus, CA sucamore, Coast live oak, Mexican mint marigold, CA pitcher sage, Bladder pod, Blue ceanothus, White sage, Black sage, Purple sage, CA sagebrush, CA sunflower, CA poppy, Matilija poppy, Lemonade berry, Catalina iron wood, Coyote bush, Pigeon point, Opuntia littoralis, and CA grape holly.

Describe the alternate water sources used for irrigation. (Maximum 100 words)

Water barrels are placed under down spouts throughout school campus to collect rain water. A 1,700 gallon cistern was installed underground to harvest rain water. Gray water is routed to large water barrels. Harvested rainwater and gray water are

used for irrigation.

Describe the program that is in place to control lead in drinking water. (Maximum 100 words)

All water fountains are fitted with water filters to reduce chlorine, lead and other types of metals. Water is sent away for lab testing 3 times a year to measure quantities of lead, aluminum, mercury, arsenic, barium, copper, lead, silver, zinc, silica, sodium, chromium, chloride, fluoride, pH, and other organic and inorganic chemicals. If quantities are found to be abnormal, the water company is notified and the water filters are repaired or replaced and not used until test results confirm the water is safe. Golden State Water Annual report is also reviewed annually to ensure water quality.

QIB3: Our school's drinking water comes from:

Municipal water source

Describe how the water source is protected from potential contaminants. (Maximum 100 words)

Q1B4: Describe any additional progress that has been made towards improving water quality, efficiency, and conservation. (Maximum 200 words)

All water fountains are outfitted with Omnipure water filters to reduce lead and chlorine. Rain/gray water is harvested around campus for irrigation. A drip irrigation system was installed to irrigate all plants. A 1,700-gallon cistern was installed underground to harvest rain water. Water is then pumped out manually for irrigation. In addition, the school's bathrooms have waterless urinals and low-flow toilets.

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QIC1: What percentage of waste is diverted from landfill or incinerator by reuse, composting, and/or recycling?

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected) : 6.93

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected) : 12.99

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) : 27.71

Recycling Rate = $[(B + C) \div (A + B + C) \times 100]$: 85.45%

QIC2: What percentage of total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), American Tree Farm System, or other certification standard. (If a product is only 30% recycled, only 30% of the cost should be counted)

30%

QIC3: What percentage of total office/classroom paper content by cost is "totally chlorine-free" (TCF) or "processed chlorine free" (PCF)?

85%

QIC4: Is there an environmentally preferable purchasing policy that prioritizes purchasing products with fewer toxic and hazardous chemicals, with higher recycle content, with greater recyclability, and with greater energy and water efficiency?

Yes

QIC5: Provide the following information about the school's hazardous waste

How much hazardous waste is produced at the school (lbs/person/year)? : .16

How is the amount generated calculated? : Before disposal, all hazardous waste is weighed and recorded.

List the types of hazardous waste generated : toner cartridge, damaged electronics (computer, monitor, printer, mouse and keyboard), light bulbs, paint, batteries, lead, nitrate solution, cleaning solutions, acids

How is hazardous waste monitored? : Hazardous waste is monitored by trained OSHA employees. Waste is labeled and stored in storage space away from staff and student contact. Some hazardous waste is stored in containers that meet regulatory

requirements. All waste is logged in Waste Disposal Log and is properly disposed of monthly. Most of the hazardous waste is toner cartridges which are sent back to the manufacturer for recycling. Hazardous waste is collected and disposed of at recycling centers. MSDS sheets for chemicals are located in the maintenance office.

QIC6: Which of the following benchmarks have been achieved to minimize and safely manage hazardous waste at the school? (Please check all that apply)

Our school has in place and actively enforces a hazardous waste policy for storage, management, and disposal of chemicals in laboratories and other areas with hazardous waste.

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

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

Which green cleaning standard is used?

QIC7: Are "third-party-certified" green cleaning products used at the school?

Yes

Provide the following information about the green cleaning products used:

What percentage by volume of all cleaning products in use are "third-party-certified" green cleaning products? : 90%

What specific green cleaning product standard (Green Seal, Ecologo, etc.) does the school use? : Green Seal and Ecologo

QIC8: Describe any other indicators of the school's reduction of solid waste and elimination of hazardous waste. (Maximum 200 words)

ECHS outsources its janitorial service (V-N-S Janitorial Services). V-N-S is currently working on obtaining Green Seal Standard for Commercial and Institutional Cleaning Services certification. Additional indicators include: • All lunch packaging is compostable • A portion of compostable materials are composted onsite • Reusable plates, cups, and utensils are used for meetings • Styrofoam use is banned at ECHS • Reusable water bottles are used instead of plastic water bottles • Fruit tree forest serves as package-free food for student use – reduces the need to purchase fruits and vegetables from markets

QID1: What percentage of students take the following to get to/from school?

Walk : 26.9

Bicycle/scooter/skateboard : 9.5

Carpool (2+ students in the car) : 34

School bus : 0

Other public transportation : 8.4

Total percentage : 78.8

Describe how these percentages were collected and calculated : The Director of Operations conducted a student survey of all students and calculated the results. The results were then verified based on observation, counting of bicycles, counting of cars dropping students off in the morning, and students walking to school.

QID2: Which of the following policies or programs have been implemented:

Our school has designated carpool parking stalls.

Our school has a well-publicized no idling policy that applies to all vehicles, including school busses.

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

Our school has established safer pedestrian routes to school which are distributed to parents and posted in the school office.

Our school has a policy to promote active forms of transportation (i.e. walking, bicycling, skateboarding, etc.).

QID3: Describe how the school transportation use is efficient and with fewer environmental impacts (e.g. the percentage of school-owned electric/hybrid/alternative fuel vehicles in the school's fleet, bus routes, or other indicators of significant reductions in emissions): (Maximum 100 words)

60% of ECHS' transportation fleet is hybrid and natural gas; 40% is fueled by gasoline. 100% of athletic team transportation and 50% of field trips is conducted with school owned vehicles instead of chartered school buses. ECHS is applying for a grant with the Port of Long Beach for an electric bus and two charging stations. ECHS will add another plug-in hybrid to its transportation fleet later this year.

QID4: Does the school have any of the following that intentionally connect students to the school grounds? (Check all that apply)

School garden
Wildlife or native plant habitats
Outdoor classroom
Restoration projects on school campus or nearby (removing invasive non-native plants, planting native plants)
Rain garden
Walking or running trails

QID5: Describe other ways in which the use of alternative transportation to and from school through the active promotion of locally-available options and implementation of enabling projects and policies have been expanded. (Maximum 200 words)

ECHS encourages students and staff to walk, carpool, bicycle, or to take public transportation to and from school. To support these efforts, ECHS is working with South Bay Bicycle Coalition which promotes bicycling in the south bay. There is a student run bicycle shop in onsite that students can rent bicycle for \$5/year. Students and community members can bring their bicycle to The Bike Shop for free service.

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Pillar 2: Healthy School Environments

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

Element 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.

Element B: 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 the school's progress toward Pillar II and its associated two elements.

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QIIA1: Which of the following pest management practices are employed? (Check all that apply)

Our school has an integrated pest management plan, as recommended by the California Healthy Schools Act, or organic gardening practices in place to reduce and/or eliminate pesticides.

Pest control policies, methods of application, pre-notification, and posting requirements are provided to parents and school employees.

Copies of pesticide labels, copies of notices, material safety data sheets (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 eight hours after the treatment, or longer if required by the pesticide label.

QIIA2: Which of the following practices are employed to improve contaminant control and ventilation? (Check all that apply)

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

Our school meets American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standard 62.1-2010 (ventilation for acceptable indoor air quality) or state or local code.

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, elemental mercury, etc. Our school has installed local exhaust systems (including dust collection systems, paint booths, and/or fume hoods) at all major airborne contaminant sources, including science labs, copy/printing facilities, art and wood shops, auto shops, technology centers, and chemical storage rooms.

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

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 guidance.

Our school visually inspects all structures 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-volatile organic compounds (VOC) products), storage and labeling, training and handling, chemical inventory, hazard communication (clean up and disposal), purchasing policy for less toxic art supplies and selecting EPA's Design for the Environment approved cleaning products.

Our school has an environmentally preferable purchasing policy.

Our school prohibits smoking on campus and in public school busses.

Our school has CO alarms that meet the requirements of the National Fire Protection Association Code 720.

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

If your school has combustion appliances, is there an inventory of them and are they annually inspected to ensure they are not releasing Carbon Monoxide? (yes/no/no combustion appliances): yes

What percentage of all classrooms with radon levels greater than 4 pCi/L have been mitigated in conformance with American Society for Testing and Materials (ASTM) E2121?: ECHS is currently awaiting the results of our Radon test. Because we used the "long" test (90 days), results will not be available until May 2012.

Q IIA3. Describe any other measures that consider student and staff health and safety in all practices related to design, construction, renovation, operations, and maintenance of school grounds. (Maximum 200 words)

No pesticides are used on campus; all products used are natural compounds. Shade structures have been installed to protect students and staff from UV exposure. In 2009-10, ECS conducted a capital campaign to renovate its science center utilizing practices to enhance student health and safety and environmental sustainability. Windows that open from the top and bottom were installed to increase the flow of natural air and to control the room's climate without using an HVAC system. Energy efficient lighting with no mercury was installed. And, outdoor learning centers were installed adjacent to the classrooms to best utilize indoor/outdoor learning experiences.

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Q IIB1: Which practices are employed to promote nutrition, physical activity, and overall school health? (Check all that apply)

Our school participates in the USDA's HealthierUS 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 on-site food garden.

Our school garden supplies food for our cafeteria.

At least 50% of our students' annual physical education takes place outdoors.

50% or more of students in 5th, 7th, and 9th grade have scored within the Healthy Fitness Zone on the California Physical Fitness Test (FitnessGram).

The school has reduced UV and heat exposure through the greening of its campus (e.g. planting trees, building shade structures, or converting asphalt areas to green spaces).

List your school's USDA HealthierUS School Challenge award level or describe other nutrition program. (Maximum 100 words)

ECHS has not been assigned a challenge award level. Other nutrition programs in which we participate include: -National School Lunch Program -Revolution Foods Family Corner -Network for Healthy Schools -Harvest of the Month

Describe the type of outdoor exercise opportunities and nature-based recreation available to students. (Maximum 200

words)

Students participate in a series of outdoor education experiences, highlighted by overnight trips with opportunities for nature-based recreation. In 9th grade, students travel to Catalina Island to participate in the 3-day CELP (Catalina Environmental Leadership Program) where students kayak, hike, rock climb, and snorkel. 10th graders travel to Joshua Tree where they explore the desert biome as they camp in tents outside (the first time for many). They participate in a geo-caching activity, hiking, and rock climbing. In 11th grade, students take a moderately strenuous 3-day backpacking trip through the Sespe Wilderness where they carry everything and "leave no trace". In 12th grade, students explore an urban environment, utilizing their own resourcefulness and problem-solving techniques to accomplish tasks. In this adventure, students walk miles, navigate public transportation systems, and engage in physically challenging tasks. In addition, students participate in other outdoor trips and projects, including working on the Pacific Rim Trail, restoring the LA River watershed, and multiple projects on campus and in their own communities. Students also can choose from the following outdoor learning/recreation opportunities as part of our elective program: gardening, Places of Blight, dance, cheer, soccer, softball, and baseball.

Q IIB2: What percentage (by cost) of food purchased is certified as "environmentally preferable" (e.g. Organic, FairTrade, Food Alliance, Rainforest Alliance, etc.)?

40%

Q IIB3: Describe any other measures regarding high standards of nutrition, fitness, and quantity of quality outdoor time for both students and staff, that should be considered. (Maximum 200 words)

In partnership with our food service provider, Revolution Foods, ECHS hosts monthly "Fight Junk Food" lunch time events to promote healthier meal options, with the help of dedicated ECHS student food fighters. Ten ECHS students have chosen to promote healthy eating and better nutrition in their school community as their service learning project for the year. These students worked with Revolution Foods to learn how to present demonstrations about fat and sugar content in popular foods and beverages to their fellow students. In addition, due to the multiple outdoor learning centers and the favorable year-round climate, ECHS students and staff spend a considerable amount of time outdoors, for both instruction and recreation. We estimate that approximately 25-30% of the school day is spent outdoors.

13. Page 13

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:

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

Element 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.

Element C: 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 the school's progress toward Pillar III and its associated three elements.

14. Page 14

Q IIIA1: Which practices are employed to help ensure the environmental and sustainability literacy of graduates? (Please check all that apply)

Our school has an environmental or sustainability literacy graduation requirement.

Environmental and sustainability concepts are integrated throughout the curriculum.

Environmental and sustainability concepts are integrated into classroom based and school-wide assessments.

Professional development opportunities in environmental and sustainability education are provided for all teachers.

Describe the school's environmental or sustainability literacy graduation requirement. (Maximum 200 words)

ECCHS requires all of its students to complete a sequence of environmental education courses. In 9th grade, all students take Environmental Science as an introduction to the interdisciplinary study of the environment. In 10th grade, all students take Green Ambassadors, an environmental leadership course in which students learn how to take action to solve environmental problems that they have identified right in their own community. In the 11th grade, students have the opportunity to participate in an internship with a local community organization that works to address environmental problems. Internship partners have included: City of Lawndale, Surfrider, Mattel, Northrop Grumman, From Lot to Spot, One Stop Youth Center, Pacific Crest Trail Association, Coalition of Humane Immigrant Rights of Los Angeles (CHIRLA), and Animal Control. Lastly, the high school experience culminates with a senior thesis project in which all students choose a community issue of significance on which to research, take action, and prepare a formal written paper and presentation to a panel.

Describe how environmental and sustainability concepts are integrated throughout the curriculum.

ECCHS teachers have been introduced to the Education and the Environment Initiative (EEI) Curriculum units during professional development and are required to integrate sustainability standards into their own course curricula and benchmark assessments. The EEI Curriculum allows students to engage with California's Environmental Principles and Concepts in a progressive and integrated manner, so that they come to see how all disciplines are connected and interdependent. In addition to the integration of environmental literacy concepts within each course, ECCHS teachers and students engage in a 4-week intersession each year in which each grade level studies a significant environmental issue in a truly interdisciplinary manner. During this intersession, students take a break from departmentalized courses to focus on an issue and learn real-world applications of the academic standards. For example, 9th grade students learned about sustainable design and architecture and worked on teams to create models of college campuses that embodied environmental sustainability. As their culminating activity, they presented their models to a panel of architects who provided valuable feedback. The project successfully integrated math, science, language arts, visual arts, as well as environmental literacy.

Describe any classroom based or school-wide assessments in environmental and sustainability concepts and include what percentage of students scored "proficient" or better by local standards. (Maximum 200 words)

ECCHS' Intersession projects serve as capstone benchmarks of achievement of the school's expected learning results. All of the projects are focused on themes of environmental literacy and are linked to the sustainability standards. Last year, 81% of students demonstrated proficiency on this assessment. Grade level proficiency rates were: 9th – 73%, 10th – 84%, 11th – 88%, and 12th – 81%. ECCHS utilizes the CSTs in Integrated Science I and Life Sciences to help measure students' proficiency in environmental and sustainability standards. While there are no CSTs that align exactly with the Environmental Science and Green Ambassadors classes, we have found that these two tests are most closely aligned to the curriculum in those classes, respectively. ECCHS students consistently out-perform statewide peers on both of these tests. In 2011, 34% of ECCHS students scored "proficient" or better on the Integrated Science I CST compared to 20% of students in California. In 2011, 69% of ECCHS 10th graders scored "proficient" or better on the 10th grade Life Science CST compared to 50% of California 10th graders. The Green Ambassadors class also utilizes a culminating benchmark on which 90% of students performed proficient.

Describe professional development opportunities available in environmental and sustainability standards. Include the percentage of teachers who participated in these opportunities over the past two years. (Maximum 200 words)

Through a partnership with UCLA Extension, Environmental Charter Schools has developed a professional development series of courses, called the Green Ambassador Institute, to teach and support educators to successfully implement our Green Ambassador Program, which incorporates environmental literacy standards and other best practices in environmental education. To date, 75% of ECCHS teachers have participated in the training and are actively using the curriculum and practices in their courses. Our most experienced and skilled teachers teach the courses to ECCHS teachers as well as to educators from other schools. In addition, 100% of ECCHS teachers participate in a two-week professional development program each summer that supports the integration of environmental and sustainability standards within the ECCHS curriculum and programs. This professional development program includes visits to local environmental organizations like Tree People and Heal the Bay to learn about the ample teaching resources that exist within the local community. In the last two years, 25% of ECCHS staff have participated in conferences focused on environmental and sustainability education (e.g., Generation Earth, Green Schools Network Conference, EarthWatch, Nature Conservancy).

Q IIIA2: If the school serves grades 9-12, provide the following information:

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career : 23%

Percentage of these students who scored a three or higher on the AP Environmental Science examination : 38%

Q IIIA3: Provide examples of school site projects and practices that demonstrate how students learn about the environment and sustainability, (e.g. storm drain stenciling, composting, pond/stream study, school farms, forests, restoration projects, native plant, pollinator, and vegetable gardens, etc.) (Maximum 200 words)

Since leasing an old former elementary school in 2008, we have transformed our small, urban campus into a green oasis amid concrete. To reduce pooling of water and urban runoff, students worked with permaculture experts to create a natural stream that now flows through the center of campus, providing natural beauty and a habitat for plants and animals. Students gather water samples from the stream to monitor the health of its ecosystem. We have worked with community partners to build several outdoor learning centers including: • raised bed gardens • an organic fruit tree orchard • native plants throughout the campus • recycling and composting stations • rain water catchment barrels and cistern • aquaculture station • green walls • chicken and bunny coops • solar-powered green house • bicycle repair shop Interpretive signs around campus help to explain the educational and environmental significance of the various campus features. Students take responsibility for maintaining many of the outdoor learning centers and teachers regularly incorporate them into their class assignments. Students lead campus tours for up to 600 visitors each year, demonstrating how the campus projects both extend their own learning and teach the community about the environment and sustainability.

Q IIIA4: Supply any additional information that demonstrates how students learn about the environment and sustainability at every grade level within the school, incorporating both content and practice. (Maximum 200 words)

In addition to the environmental course sequence that all students complete (described above in IIIA1), there are multiple environmental learning opportunities and practices embedded throughout the curriculum. Students take a variety of field trips to environmentally significant locations and each grade level participates in an outdoor education overnight field trip: 9th grade – Catalina Educational Leadership Program, 10th grade – Joshua Tree National Monument, 11th grade – Sespe Wilderness Backpacking, and 12th grade – Urban Outdoor Adventure. All grade levels participate in an interdisciplinary intersession project (described in IIIA1) where students examine an environmental issue and complete a service learning project. Students also choose from a variety of electives including Solar Boat, Rashion (designing recycled clothing), gardening, Rise Above Plastics (training in research and public speaking), Spaces of Blight (transforming blighted areas into public spaces), bicycle repair shop, and the Rediscover Shed (where discarded items are repurposed and reused). All students must complete 20 hours of community service each year. All science classes incorporate the many outdoor learning stations on campus including aquaculture, livestock, composting, and gardens.

Q IIIB1: Do science courses frequently use sustainability and the environment as a context for learning science (such as asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument from evidence when exploring environmental and sustainability issues)?

Yes

Describe how science courses frequently use sustainability and the environment as a context for learning science. (Maximum 200 words)

All of ECHS' science classes utilize sustainability and the environment as a context for learning science and all teachers received PD on incorporating the EEI sustainability standards into their core courses. Environmental Science uses this context all year as they study ecology, plan inquiry projects, and collaborate locally and internationally on projects that compile environmental data to compare regions. All of our science teachers focus on science inquiry as an integral component of their classes. For example, Biology students have participated in a water quality project in which they worked with scientists in the field to gather sand and water samples to measure the plastic content. They also conducted a dissection of the bolus of an albatross to measure its plastic content. The data was collected, cataloged, analyzed, and included in a formal research study conducted by a local environmental organization. In Chemistry, students learned about the properties of different types of fuel and even made their own bio-diesel. Science classes make regular use of the many outdoor environmental learning centers including the natural stream (for water quality testing), the gardens and green houses (for botany), the aquaculture lab, and the chicken coop.

Q IIIB2: Does the school's curriculum make connections between classroom and college and career readiness, in particular, post-secondary options in environmental and sustainability fields (for example, courses, modules, or activities introducing students to environmental sustainability related career options, or career technical education in courses such as green sustainable design and technology, green construction, green energy, etc.)?

Yes

Describe these connections between classroom and college and career readiness. (Maximum 200 words)

ECHS utilizes many best practices that connect the curriculum with college and career readiness, especially in environmental and sustainability fields. All teachers are trained to develop learning experiences and projects that have real-world application, thereby helping students to understand their relevance. ECHS also utilizes multiple community partners so that students not only see the direct application of the academic work, but are exposed to careers that they might not have otherwise known. In 9th, 11th, and 12th grade, all students take "College Prep", a course designed to support college and career readiness. Grade 10 students take Green Ambassadors which also helps to connect the core subject areas to green career exploration. ECHS College Prep teachers have designed a unique curriculum by which students explore their interests and are exposed to new subject areas and careers. As an environmentally themed school, ECHS makes a special effort to expose students to the growing fields of green technology and environmental study through its annual Green Career Day, Internship Program, and job shadow program. Our electives, which include Solar Boat, Bike Repair, and Spaces of Blight, also help to connect our environmental curriculum to "real-work" applications.

Q III B3: Provide any additional evidence of how the environment and sustainability develop STEM content knowledge and thinking skills to prepare graduates for the 21st century-technology driven economy are used. (Maximum 200 words)

In 2009, ECHS developed a unique approach to the teaching of STEM in which STEM teachers and environmental education teachers were trained to create lessons that integrated the STEM standards within environmental education and vice versa. This approach was originally called "Green Math" but has since been expanded to all STEM subjects. It is based on the belief that traditional STEM education had been too narrowly defined by standardized test scores based on the abstract isolation of discrete skills and disconnected standards. We wanted our students in math and science classes to experiment, practice critical thinking skills, numeracy skills, and honor the curious scientist within. The problems that are facing our world in the 21st century require numerical literacy to question assumptions and defend logical arguments, to be able to think and reason independently, and to formulate our own questions and defend our own answers. These are the skills that will be essential in the emerging fields of Environmental Engineering and Green Technology. This inquiry-based approach brings to life the core of practicing the Scientific Method as it applies to questioning the costs, benefits, and tradeoffs of different technology solutions to complex environmental problems.

Q III C1: At which grade levels do students conduct an age appropriate, self-selected, civic/community engagement project related to environmental sustainability?

All grade levels

Describe civic/community projects and specify at which grade level each is implemented. (Maximum 200 words)

Students graduate from ECHS uniquely prepared to independently conduct community research and engagement projects that are relevant, effective, and measurable. At each grade level, students conduct community engagement projects related to environmental sustainability, with growing levels of independence as they progress from grade to grade. All students create their own project to help teach local elementary students at the annual ECHS Earth Day Educational Fair. At this event, which has hosted 1,000 students annually, ECHS students prepare a lesson, project, presentation, piece of art, or performance to teach about an environmental issue. All 10th grade students hold four different community engagement events—focusing on water, composting, energy, and food—as part of the Green Ambassador Class. Students are taught to not only learn about these issues, but learn the skills to successfully engage the community to come to care about the issues as well. During their 12th grade year, students focus in-depth on one community issue (of environmental or community significance) and spend the year learning about it, developing a community engagement project designed to address it, and ultimately preparing a research paper and public presentation to share what they have learned.

Q III C2: Do students have meaningful outdoor learning experiences (experiences that engage students in critical thinking, problem solving, and decision making) at every grade level?

Yes

If not in all grades, specify which grades.

Share how outdoor learning is used to teach an array of subjects in context, engage the broader community, and develop civic skills, specifying at which grade level each is implemented. (Maximum 200 words)

Students participate in a series of outdoor education experiences, highlighted by overnight trips which tap into a wide range of content and skills including collaboration, problem-solving, and creativity. In 9th grade, students travel to Catalina Island to

participate in the 3-day CELP (Catalina Environmental Leadership Program) where students learn the four primary ecological principles: everything runs on energy, there is no waste in nature, biodiversity is good, and everything is connected. 10th graders travel to Joshua Tree where they explore the desert biome as they camp in tents outside--the first time for many. They participate in a geo-caching activity and further their learning on biomes, ecosystems, and plant/animal adaptations. In 11th grade, students take a 3-day backpacking trip through the Sespe Wilderness and practice the goal of "leave no trace". In 12th grade, students explore an urban environment, utilizing their own resourcefulness and problem-solving techniques to accomplish tasks. In this adventure, students learn about economics, public systems, and daily decisions in the adult world. Students participate in other outdoor trips and projects, including working on the Pacific Rim Trail, restoring the LA River watershed, and multiple projects on campus and in their own communities.

Q IIC3: Describe partnerships with the local community (e.g., academic, business, government, non-profit and informal science institutions) that help advance the school, other schools (especially schools with fewer resources) and the greater community toward the Three Pillars. Letters of support may be requested. (Maximum 300 words)

As one of its signature best practices, ECHS has successfully engaged numerous partnerships from the local community from its inception. Some examples and descriptions of these partnerships include: • Surfrider Foundation – Rise Above Plastics Student Leadership Program; • Agalita Marine Research Foundation – student research projects and advocacy • 3 Gyres – student research on ocean quality • From Lot to Spot – community projects to turn blighted lots into vibrant public spaces • Heal the Bay – student research and service projects • TreePeople – staff development and student field trips • West Basin Municipal Water District – field trips, solar boat club sponsorship; • UCLA unicamp –overnight field trips • Nature Conservancy-professional development and student internships • Sea Lab – field trips • UCLA Extension – partner in the Green Ambassador Institute PD program • South Bay Bicycle Coalition – mentoring students in creating and running their own bike repair shop on campus • Rediscover – developing a recycled/redaimed art program • Internships with Northrop Grumman, Mattel, and others • City of Lawndale - Park and mural projects • In True Fashion - entrepreneur class focusing on local production

Q IIC4: Provide any additional evidence demonstrating that school programs develop civic engagement knowledge and skills, and encourages students to apply these to address sustainability and environmental issues in their community. (Maximum 200 words)

Students regularly apply what they have learned about the environment to engage in the civic process, as a vital piece of the curriculum. In partnership with environmental organizations, students have participated in research and have presented their findings to local municipalities to advocate for environmentally friendly policies, including a ban on Styrofoam, plastic bags, and other forms of plastic. Through the Rise Above Plastics Program, students have presented more than 50 times to local groups and businesses including Google, City of Lawndale, and local schools to advocate for alternatives to single-use plastics; their presentations have led to groups adopting new environmentally sensitive policies. Students have participated in civic efforts with From Lot to Spot to advocate local officials to re-claim blighted lots for the betterment of the community. ECHS aims to be a model of sustainability for our community. Students provide guided tours of our campus twice a month for up to 50 visitors to teach about the environment and sustainability. Students also conduct workshops for local community members several times a year where they share what they've learned and provide practical responses to environmental problems, such as composting, organic gardening, and recycling.

15. Page 15

This concludes your Green Ribbon Schools Application. Please take a moment to make sure you've answered every question to the best of your ability. Once you proceed past this page, your application is considered submitted and will not be available for further editing.

If you wish to print out a hard copy of this application before final submission, and conduct a final edit, please click the "print" button.

16. Page 16

Thank you for submitting an application to California Green Ribbon Schools.

An e-mail with a copy of your application has been sent to your school's principal/head of school.

Your application will be reviewed along with all completed applications following the application deadline of February 17, 2012.

If you have any questions, please contact [Kathleen Seabourne](#).

Send email copy of response

Feb 17, 2012 10:50:44 Success: Email Sent to: rachel_ruffalo@echsonline.org

Email Confirmation

Feb 17, 2012 10:50:48 Success: Email Sent to: jenni_taylor@echsonline.org

CDE Copy of Green Ribbon Schools Application

Feb 17, 2012 10:50:51 Success: Email Sent to: kseabour@cde.ca.gov

17. Thank You!

Thank you for submitting your school's Green Ribbon application. We appreciate your participation in this program.

Response ID: 293

| | |
|----------------------------------|---|
| Survey Submitted: | Feb 17, 2012 (10:51 AM) |
| IP Address: | 71.202.4.34 |
| Language: | English (en-US) |
| User Agent: | Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.1; WOW64; Trident/4.0; GTB7.2; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; MDDC; InfoPath.2; .NET4.0C; MS-RTC LM 8; BRI/2; XF_mmhpsset) |
| Http Referrer: | http://www.cde.ca.gov/ls/fa/sf/greenribbonprog.asp |
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| URL Variable: crc | (no value) |
| URL Variable: snc | 1329355282_4f3c5a1251bd96.24679804 |
| URL Variable: _iseditlink | (no value) |
| Page Path: | 1 : Page 1 (SKU: 1) 2 : Page 2 (SKU: 15) 3 : Page 3 (SKU: 3) 3 : Page 3 (SKU: 3) 3 : Page 3 (SKU: 3) 4 : Page 4 (SKU: 17) 5 : Page 5 (SKU: 16) 6 : Page 6 (SKU: 4) 7 : Page 7 (SKU: 5) 8 : Page 8 (SKU: 6) 8 : Page 8 (SKU: 6) 7 : Page 7 (SKU: 5) |

2012 California Green Ribbon Schools Award Scoring Rubric

School Name: Environmental Charter High

| | |
|---|----|
| Cross Cutting Questions – 5 Points | 5 |
| Pillar I: Environmental Impact and Energy Efficiency – 30 Points | 24 |
| Pillar II: Healthy School Environments – 30 Points | 17 |
| Pillar III: Environmental and Sustainability Education – 35 Points | 35 |
| Total – 100 Points | 81 |

2012 California Green Ribbon Schools Award Scoring Rubric

School Name: Environmental Charter High

| Cross Cutting Questions – 5 Points | Reviewer: #4 | Reviewer: #11 | Average: |
|---|--------------|---------------|------------|
| Participation in Green School Programs and/or Awards for Environmental and Sustainability Efforts, along with commitment of school organization | | | |
| C1 (2 points): | 2 | 2 | 2 |
| C2 (1 point): | 1 | 1 | 1 |
| C3 (2 points): | 2 | 2 | 2 |
| Sub Total (5 points maximum): | 5 | 5 | 5 |
| Pillar I: Environmental Impact and Energy Efficiency – 30 Points | | | |
| Element IA: Improved energy conservation/energy-efficient building(s) - 15 Points | Reviewer: 23 | Reviewer: 10 | |
| IA1 (1point): | 1 | 1 | 1 |
| IA2 (1 point): | .5 | .5 | .5 |
| IA3 (1 point): | 1 | 1 | 1 |
| IA4 (1.25 points): | .25 | .25 | .25 |
| IA5 (2 points): | 1 | 1 | 1 |
| IA6 (2 points): | 2 | 2 | 2 |
| IA7 (2 points): | 2 | 2 | 2 |
| IA8 (2 points): | 2 | 2 | 2 |
| IA9 (2 points): | 1.5 | 1.5 | 1.5 |
| IA10 (.75 point): | .75 | .75 | .75 |
| Sub Total (15 points maximum): | 12 | 12 | 12 |
| Element IB: Improved water quality, efficiency, and conservation - 5 Points | Reviewer: 23 | Reviewer: 10 | |
| IB1(1.5 points): | 0 | 0 | 0 |
| IB2 (2 points): | 2 | 2 | 2 |
| IB3 (1 point): <i>No protection method described</i> | 0 | 0 | 0 |
| IB4 (.5 point): | .5 | .5 | .5 |
| Sub Total (5 points maximum): | 2.5 | 2.5 | 2.5 |

| | | | |
|---|--------------|--------------|-------------|
| Element IC: Reduced waste production and improved recycling and composting programs 5 Points | Reviewer: 23 | Reviewer: 10 | |
| IC1 (.5 point): | .5 | .5 | .5 |
| IC2 (.75 point): | .75 | .75 | .75 |
| IC3 (.75 point): | .75 | .75 | .75 |
| IC4 (.75 point): | .75 | .75 | .75 |
| IC5 (.5 point): | .5 | .5 | .5 |
| IC6 (1 point): | .75 | .75 | .75 |
| IC7 (.5 point): | .5 | .5 | .5 |
| IC8 (.25 point): | .25 | .25 | .25 |
| Sub Total (5 points maximum): | 4.75 | 4.75 | 4.75 |
| Element ID: Use of alternative transportation to, during, and from school - 5 Points | Reviewer: 23 | Reviewer: 10 | |
| ID1 (1 point): | 1 | 1 | 1 |
| ID2 (1.5 points): | 1.25 | 1.25 | 1.25 |
| ID3 (.75 point): | .75 | .75 | .75 |
| ID4 (1.5 points): | 1.5 | 1.5 | 1.5 |
| ID5 (.25 point): | .25 | .25 | .25 |
| Sub Total (5 points maximum): | 4.75 | 4.75 | 4.75 |
| Pillar II: Healthy School Environments – 30 Points | | | |
| Element IIA: An integrated school environmental health program -15 Points | Reviewer: 4 | Reviewer: 11 | |
| IIA1 (2 points): | 2 | 2 | 2 |
| IIA2 (12 points): | 12 | 12 | 12 |
| IIA3 (1 point): | 1 | 1 | 1 |
| Sub Total (15 points maximum): | 15 | 15 | 15 |
| Element IIB: High standards of nutrition, fitness, and quantity of quality outdoor time -15 Points | Reviewer: 4 | Reviewer: 11 | |
| IIB1 (13 points): | 10 | 10 | 10 |
| IIB2 (1 point): | 1 | 1 | 1 |
| IIB3: (1 point): | 1 | 1 | 1 |
| Sub Total (15 points maximum): | 12 | 12 | 12 |
| Pillar III: Environmental and Sustainability Education – 35 Points | | | |
| Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems - 20 Points | Reviewer: 1 | Reviewer: 6 | |
| IIIA1 (15 points): Q1-3 Q2-4 Q3-4 Q4-4 | 15 | 15 | 15 |
| IIIA2 (0 points): | 0 | 0 | 0 |
| IIIA3 (4 points): | 4 | 4 | 4 |
| IIIA4 (1 point): | 1 | 1 | 1 |
| Sub Total (20 points maximum): | 20 | 20 | 20 |

| | | | |
|--|-------------|-------------|-----------|
| Element IIIB: Use of the environment and sustainability to develop Science, Technology, engineering, and Mathematics (STEM) content, knowledge, and thinking skills - 5 Points | Reviewer: 1 | Reviewer: 6 | |
| IIIB1 (2 points): | 2 | 2 | 2 |
| IIIB2 (2.75 points): | 2.75 | 2.75 | 2.75 |
| IIIB3 (.25 point): | .25 | .25 | .25 |
| Sub Total (5 points maximum): | 5 | 5 | 5 |
| Element IIIC: Development and application of civic engagement knowledge and skills -10 Points | Reviewer: 1 | Reviewer: 6 | |
| IIIC1 (3.5 points): | 3.5 | 3.5 | 3.5 |
| IIIC2 (3 points): | 3 | 3 | 3 |
| IIIC3 (3 points): | 3 | 3 | 3 |
| IIIC4 (.5 points): | .5 | .5 | .5 |
| Sub Total (10 points maximum): | 10 | 10 | 10 |
| | | 35 | |
| Total – 100 Points | | | |

Disadvantaged School Nominee

California submits the “Environmental Charter High School” as the nominee with at least 40 percent of the students from a disadvantaged background. “Disadvantaged Background” is defined as students who are eligible for free and reduced-priced school meals. Environmental Charter High School has 80 percent of the student population identified as disadvantaged.

| School | <u>Free & Reduced Price Meals</u> | <u>Unofficial Enrollment Used for Meals</u> |
|--|--|--|
| ENVIRONMENTAL CHARTER HIGH | 381 (80.9%) | 471 |
| District Total: | 5,070 (81.3%) | 6,236 |
| County Total: | 1,017,249 (65.3%) | 1,557,089 |
| State Total: | 3,465,446 (56.7%) | 6,113,250 |

California defines Free or Reduced Meal Program as counts of children **enrolled** in the Free or Reduced Price Meal Programs. This is a federal program administered by the US Department of Agriculture. Program participation is by application and is based on the income of the child's parent or guardian.

It is important to distinguish “enrolled” from “eligible” and “participating.” Here are the distinctions:

Eligible = Family meets the economic criteria for participation (we do not collect eligibility data)

Enrolled = Student's family has met eligibility criteria and student is “signed up” to participate

Participation = Student is actually receiving free or reduced price meals

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 2012

For Public Schools only: (Check all that apply) [] Charter [] Title I [] Magnet [] Choice

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

Official School Name Environmental Charter High School
(As it should appear in the official records)

School Mailing Address 16315 Grevillea Avenue
(If address is P.O. Box, also include street address.)

Lawndale CA 90260
City State Zip

County Los Angeles State School Code Number* 19-64691-19964380353

Telephone (310) 2143400 Fax (310) 214

Web site/URL ecsonline.org E-mail Alison@ECSONline.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.

Jenni Taylor Date 3-19-12
(Principal's Signature)

Name of Superintendent* Ms Allison Suflet-Diaz
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* Environmental Charter Schools Tel. (310) 989-1990

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.

Allison Diaz Date 3-19-12
(Superintendent's Signature)

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

U.S. Department of Education Green Ribbon School Application

A “Snapshot” of Environmental Charter High School’s Green Efforts, Strengths, and Accomplishments

At Environmental Charter High School (ECHS), the environment is not simply an academic endeavor; we practice what we teach, with the students taking the lead. Since moving to an old former elementary school in 2008, ECHS has implemented numerous greening initiatives, transforming a small, urban campus into a green oasis in South Los Angeles’ concrete desert. The result is one of the most environmentally progressive campuses in the country. Much of the transformation was the result of the students identifying problems and collaborating with staff and community partners to develop solutions. A summary of those greening efforts includes:

- A renovated science center, built in accordance with LEED specifications, designed to save energy, water and resources, thereby reducing CO2 emissions.
- Raised bed gardens and an organic fruit tree orchard which provide healthy, package-free, sustainable snacks for students and staff.
- A 1,700-gallon, underground water cistern that irrigates the school’s gardens and fruit trees.
- A student-maintained closed-loop aquaponics system that recycles water for repeated use.
- Chickens & rabbits – all maintained by the students – whose waste serves as fertilizer for the plants, giving students important insights into how a healthy ecosystem works.
- A “living wall”, made of fabric planters attached to an exterior wall, enables students to grow food in a limited space.
- A student-designed arroyo river bed that demonstrates the “aquifer recharge” process whereby groundwater seeps down through the soil into an underlying aquifer to create a usable water supply for the native plants growing there.
- A greenhouse powered by 3kW rooftop solar energy panels and a solar-powered water pump that is used to supply irrigation for plants inside the greenhouse.
- An outdoor amphitheater made entirely of recycled concrete (urbanite)
- Recycling and composting stations
- A student-run bicycle repair shop which encourages students and staff to ride rather than drive to school.
- An environmentally preferable purchasing policy that prioritizes purchasing products with fewer toxic and hazardous chemicals.

Strengths and Accomplishments

Environmental/Health Accomplishments

- 24.5% reduction in non-transportation energy use from 2009 to 2012.
- 2.35% of the school's energy is obtained from on-site renewable energy generation.
- 16.5% reduction/offset of greenhouse gas emissions from building energy use
- 85% of waste is diverted from the landfill by reducing use, recycling, composting, and choosing compostable materials. The school has banned the use of plastic bags, single-use plastic bottles, and Styrofoam.
- 90% of all cleaning products in use are "third-party-certified" green cleaning products.
- 60% of ECHS' transportation fleet is hybrid and/or natural gas.
- 40% of the food served in school lunches comes from local organic farms.
- 45% of students walk, ride, or take the bus to and from school. An additional 34% carpool.

Educational Accomplishments

ECHS' greening initiatives and innovative curriculum provide students with unique learning experiences that inspire students to find authentic meaning in their studies. The result is students who are prepared for college, motivated to continue their learning, and who desire to positively contribute to their community. Specific accomplishments include:

- A 90% 4-year college acceptance rate; our alumni are attending some of the most prestigious colleges in the country including Brown, UC Berkeley, UCLA, William & Mary.
- Environmental sustainability themes are integrated within all subjects and courses.
- All teachers receive professional development to implement the Education and the Environment Initiative (EEI) Curriculum.
- A 4-year Environmental Education curriculum for all students which complements and is integrated with the core curriculum.
- A 4-week interdisciplinary intersession where all students study an environmental topic, culminating in community-based service learning projects.

Community Accomplishments

ECHS students regularly apply what they have learned about the environment through community engagement projects. Specific examples include:

- The Rise Above Plastics Program, in partnership with *Surfrider Foundation*, through which students have presented more than 50 times to local groups and businesses including Google, City of Lawndale, and local schools to advocate for alternatives to single-use plastics.

- Civic efforts with *From Lot to Spot* to encourage local officials to re-claim blighted lots for the betterment of the community.
- Student-led tours of our campus, for up to 3,000 visitors annually, to teach about the environment and sustainability.
- Annual Earth Day Educational Fair for up to 1,000 local elementary students, where ECHS students conduct lessons, demonstrations, dramatic presentations, and art exhibits to teach about environmental sustainability.
- The Green Ambassador Institute – a professional development program designed by ECHS, in partnership with UCLA Extension, has taught more than 100 educators how to integrate environmental standards and practices into their curriculum and school's operations.
- Student-led workshops for the community on sustainable practices such as composting, rain catchment systems, and fruit tree planting and maintenance.
- Partnerships with businesses, such as Paramount Studios and AAA, to help them implement green practices.

Environmental Charter High School

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 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.
2. 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.)
3. 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.
4. The Nominating Authority has evaluated the school and selected it for submission to the U.S. Department of Education from among those schools overseen by the Nominating Authority which have applied for a Green Ribbon, based on *documented achievement* toward the three Green School Pillars and Elements.
5. 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: California Department of Education

Name of Nominating

Authority: Tom Torlakson, State Superintendent of Public Instruction

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 3/20/12

(Nominating Authority's Signature)