Accessible Version



**District Application** 

### **U.S. Department of Education Green Ribbon Schools**

### School Facilities and Transportation Services Division

Welcome to the California Department of Education's application for nomination to U.S. Department of Educations Green Ribbon Schools (ED-GRS). This is the District Sustainability Award application; applicants for the school-level award should request a school application at <a href="http://surveys2.cde.ca.gov/go/greenribboninterest.asp">http://surveys2.cde.ca.gov/go/greenribboninterest.asp</a>. This application is for public school districts and charter management organizations only. Private schools are not eligible to participate in the district-level award.

Directions for this application are available to view, download, and print on the CDE Web page: <u>http://www.cde.ca.gov/ls/fa</u>/sf/greenribbonprog.asp. Please review the directions before you begin the application.

### Reminders

Once you begin the application, you may save and return to it at any time until you hit the **Submit** button. Questions that require a response are marked with an asterisk (\*). The application must be completed online and is due no later than 5:00 P.M. PST on December 29, 2014.

For assistance in completing this application, please contact Lesley Taylor in the School Facilities and Transportation Services Division at 916-322-0310 or by e-mail at greenribbonschools@cde.ca.gov.

### Certifications

By submitting this electronic application, the district superintendent certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true. A charter management organization must obtain certification from the authorizing school district, county office of education, or the State Board of Education.

1. The public school district or charter management organization has some configuration that includes one or more of grades Pre-K-12.

2. The public school district or charter management organization has been evaluated and selected from among public school districts as highest achieving in the Three Pillars of ED-GRS: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.

3. The public school district or charter management organization is not 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 district or charter management organization meets all applicable federal, state, local, tribal health, environmental, and safety requirements in law, regulations, and policy and is willing to undergo EPA on-site verification.

### **District Information**

CD Code: 19-75333 County: Los Angeles District: Manhattan Beach Unified Address: 325 South Peck Avenue, Manhattan Beach, CA, 90266-2478 Grades Served: K-12 Enrollment: 6894

Administrator Name: Michael Matthews Administrator E-mail: mmatthews@mbusd.org Administrator Telephone Number: 310-318-7345

Lead Applicant Name: [No Reply] [No Reply] Lead Applicant E-mail: [No Reply] Lead Applicant Telephone Number: [No Reply]

Above is the information that we have for you and your district. Is this correct? \*

- Yes
- No

Make any necessary changes:

Administrator Name Update

Administrator E-mail Update

Administrator Telephone Number Update

Lead Applicant Name Update

Lead Applicant E-mail Update

Lead Applicant Telephone Number Update

Mariel Waller		
mvdhrew@aol.com	 	
3107386480		

For other updates, please contact us at 916-322-0310 or greenribbonschools@cde.ca.gov.

### Narrative

Provide a narrative describing your district's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships. (4,000 characters maximum; ? characters used)

MBUSD general Information: 5 elementary schools (Grand View, Meadows, Pacific, Pennekamp, Robinson), 1 middle school (MBMS), 1 high school (Mira Costa). Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has. (Margaret Mead) How did Manhattan Beach Unified School District begin its green journey? Committed students, parents, teachers and partners have led us, and the district had the courage to say, "Yes!" to their ideas. Our efforts led to one of our schools becoming a National Green Ribbon School in 2012. The green movement continues to build and it is now truly district wide. MBUSD is a case study of how a grassroots effort can change an entire community. Our story begins with two groups of parents helping their children. Grades of Green (www.gradesofgreen.org) began as parents working to reduce waste. Growing Great (www.growinggreat.org) began as parents working to help our students understand the role of gardens and natural food in our lives. They made a difference at one elementary school, then all schools in our district, then schools around the nation. These committed groups of citizens are making a difference. Our waste reduction efforts include assemblies led by parents and students. Students starred in videos doing the dirty yet fun work of waste audits, showing how we could significantly reduce our waste. We are creating better citizens of the earth, and we are creating committed leaders who will change the world. Every first grader in MBUSD receives a trash-free lunch box designed by a parent (www.gogreenlunchbox.com) and sponsored by Waste Management. It is a clear message of our commitment to waste reduction. Committed parents and a committed company are leading change in the world. The district hires one employee to monitor energy use and encourage employees to be green. The employee sees when lights are left on, when the swimming pool is uncovered, when anything unnecessary is left plugged in, or when sprinkler heads are broken. The employee thanks employees for good habits and reminds those who are not yet there. Not only are we a greener place, but we have saved hundreds of thousands of dollars. One committed employee has led the way. Our "Walking School Bus" is another committed citizen-led change. Every morning, several volunteer "conductors" start up their "buses" on established routes at an established time. Students and parents get on the bus smiling as they walk to school together. It's one big reason why more than 50% of our students walk, bike or carpool to school. The MEUSD Board of Trustees led green changes in our District. Five years ago, they approved a building project that recently won awards for environmental conservation. Last year our Board approved a project to add solar panels and change every light into a long lasting and energy conserving LED light. These steps will save millions of dollars and will dramatically reduce our ecological footprint. These committed citizens are making a difference. Committed teachers are making a difference every day. A teacher requested the new AP Environmental Science course that is now one of our most popular courses. Teachers sponsor environmental clubs and encourage students to be green change agents. Teachers lead debate teams focusing on world environmental issues, take on the best debaters in the world - and win. These committed teachers make a difference every day. These are but a few of the stories where a committed group of students, parents, teachers and partners have made a difference. Sometimes the best thing to do is just "Say yes." MBUSD has said yes to our committed citizens over and over, and the result is a green district that shines as a beacon for our community. And while we are proud of all we have done, there is still a group of committed citizens who are still asking for change. And MBUSD is still a district that is ready to say, "YES!"

### **Cross-cutting Questions** [5 points total]

Is your district participating in a local, state, or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?

[1.5 points]

Yes

O No

What program(s) and level(s) were achieved and how many schools within the district received these awards? (500 characters maximum; ? characters used)

Grades of Green Certification program-certification pending for all sites. Grades of Green is piloting its certification program in our District. It is currently conducting eco-audits of our campuses to determine compliance with 40 environmental goals and provide recommended best practices and next steps for each school and district. - Six out of seven of our schools meet the eligibility requirements for EPA ENERGY STAR certification. We will be applying for certification in January 2015.

### Has your district received any awards for facilities, health, or environment?

[1.5 points]

Yes

No

List the award(s) and year(s) received and how many schools within the district received these awards: (500 characters maximum; ? characters used)

AS&U Award-energy conservation focus in construction 2014 Cenergistic Environmental Excellence Award 2012 National Green Ribbon School Award 2012 Energy Stewardship Energy Education Award 2011 City of Manhattan Beach Award of Excellence 2010 EPA Environmental Award 2009 US Mayoral Public/Private Partnership Award 2009 County of LA Green Leadership Award 2009 Disney's Family Fun Grand Prize Winner 2009 VOICE Environmental Hero Award 2008, 2011 SBBEC SoCal Environmental Excellence Development Award 2008

Is there a forum provided where all representative stakeholders involved in the daily operation of the district (such as students, faculty, maintenance, and cafeteria staff) can meet to discuss, plan, and implement ongoing green efforts? [2 points]

Yes

No

### If yes, describe: (1,000 characters maximum; ? characters used)

Stakeholder meetings have occurred periodically in the Manhattan Beach School District since 2007. Currently, the Green Council meets quarterly and is jointly chaired by MBUSD and PTA Council. Stakeholders include representatives from each of the seven schools in the district, a school principal, MBUSD Superintendent, MBUSD Energy Specialist, MBUSD Director Maintenance & Operations, MBUSD Director Food & Nutrition Services, City Environment Manager, City Public Works, and representatives from Waste Management and local organizations Grades of Green, Growing Great and Beach Cities Health District. The Green Council provides a forum for discussing district-wide green efforts and developing a green master plan for the district.

### Pillar I: Reduced Environmental Impact and Costs

### **Element IA - Energy**

### [15 points total]

Does your district have a plan in place to manage and reduce energy use, such as an energy master plan, an energy conservation plan, an energy charter, an energy action plan, or energy conservation guidelines? [1 point]

Yes

O No

If yes, describe what type of plan: (500 characters maximum; ? characters used)

Our Master plan is guided by a MBUSD Green School Operations plan, approved in 2006. To implement the plan MBUSD has partnered with Cenergistic since 2010 and more recently with Chevron (Oak Tree) to manage our resources wisely. This resulted in additional \$190,000 in energy costs savings every year. This year we will add solar power and also light fixtures retrofitted/replaced with new LED fixtures. The High School pool will get solar thermal hot water heating and a variable frequency drive

Can your district demonstrate a reduction in greenhouse gas (GHG) emissions? [up to 2 points]

Yes

No

### Percentage reduction over time: (Example: 15% reduction from 09/2010 to 06/2013)

Offsets purchased, if any:	
Final GHG Emissions rate is 557 in 2014. 0.074	
Final GHG emissions rate: (MTeCO2/person)	
Initial GHG Emissions rate was 833 in 2009. 0.114	
nitial GHG emissions rate: (MTeCO2/person)	
The reduction rate is 33% from 6/2009 to 7/2014	

The percentage reduction was calculated utilizing Cenergistic ECAP systems. Data has been collected and entered from 2009-2014. Calculations were made with the assistance of a Cenergistic company staff member.

### Element IA - Energy

### (continued)

Do you track resource use in EPA ENERGY STAR Portfolio Manager? [up to 2 points]

Yes

O No

What percentage of your schools has received EPA ENERGY STAR certification or meets the eligibility requirements for certification?

86% of our schools meet the eligibility requirements for EPA ENERGY STAR certification.

List the schools, years, and scores received:

Rob 99% 2014, Pac 99% 2014, PK 95% 2014, GV 90% 2014, Mea 92% 2014, MBMS 94% 2014

Has your district reduced its total non-transportation energy use from an initial baseline? [up to 2 points]

Yes

O No

Current energy usage by student: (kBTU/student/year)

3439 kBTU/student/year

Current energy usage by area: (kBTU/square feet/year)

37.59 kBTU/square feet/year

Percentage reduction over time: (Example: 15% reduction from 09/2010 to 06/2014)

27% reduction from 2009 to 2014.

How did you document this reduction? (500 characters maximum; ? characters used)

The percent reduction was calculated utilizing Cenergistic ECAP Systems. Data has been collected and entered since 2009 and continuing through 2014. Calculations were made with the assistance of a Cenergistic company staff member.

### **Element IA - Energy**

(continued)

What percentage of your district's energy is obtained from on-site renewable energy generation and what type? [1 point]

Less than 1% of the district's energy is obtained from on-site renewable energy

What percentage of your district's energy is obtained from purchased renewable energy and what type?

[1 point]

Does your district participate in federal, state, or utility school energy program(s)?

[1 point]

Yes

No

If yes, what percentage of schools and which program(s)? (500 characters maximum; ? characters used)

All of our schools (100%) participate in the incentive and energy savings programs that are available through Southern California Edison. We additionally participate in Proposition 39 California Clean Energy Jobs Act, a state program providing funding to local educational agencies for improving energy efficiency and creating clean energy jobs. We are planning on using the State of California Solar Initiative with implementation of solar thermal and photovoltaic systems.

Describe how any school construction or renovation projects occurring in the past ten years meet green building standards, including any certification earned. (1,000 characters maximum; ? characters used) [up to 2 points]

All of the new construction/renovation projects incorporate green building standards but do not have certification (LEEDS). The classrooms have natural day lighting and use state of the art lighting that includes occupancy sensors and light sensors that adjust the level of light coming from the light fixtures. All HVAC systems incorporate economizers that use outside air to heat or cool buildings whenever temperature conditions allow. The new buildings/renovations also use wall density and insulation along with reflective roofs to control heat load from outside. Our new math/science building on the high school campus was recognized by American School and University as the top project in the high school category for its energy conservation focus.

## Has your district developed a program or made progress toward reducing the heat island effect with cool roofs, reduced pavements, or reflective coatings on pavement?

[1 point]

Yes

No

### Describe the program(s) and/or physical improvements made by site. (500 characters maximum; ? characters used)

All of our district roofs have reflective coatings to reduce thermal load/heat island effect. The high school quad area as well as fields at the middle school and all elementary schools use large planter vegetation areas along with large grass seating/lounge areas to further reduce the heat island effect. We also have many large trees and sun shade areas district wide that further reduce heat island effect.

# What has your district done to reduce energy use (such as lighting retrofit, installation of an energy management system, etc.)? (500 characters maximum; ? characters used) [up to 2 points]

60% of our schools have occupancy sensors for lighting. The new/renovated buildings also have daylight sensors that reduce light output. All new buildings have state of the art HVAC management systems that utilize outside air to condition the rooms. We retrofit 100% of our lights with LED. MBUSD will install solar structures summer 2015 which will provide at least 30% of our electrical needs. Solar thermal hot water heating and a variable frequency drive will be added at the high school pool.

### Element IB - Water and Grounds [5 points total]

### What is your district's water use per person?

[up to 0.5 point]

District water use per person is 20.3 gallons per year.

Can you demonstrate a reduction in your district's total water consumption from an initial baseline? [up to 1.5 points]

Yes

No

Established baseline water use: (gallons/occupant/year)

Current water use over the past year: (gallons/occupant/year)

Percentage reduction in domestic water use over time: (example: 15% reduction from 09/2010 to 06/2014)

How did you document this reduction (e.g., ENERGY STAR Portfolio Manager, utility bills, school district reports)? (500 characters maximum; ? characters used)

### Element IB - Water and Grounds

(continued)

Is the district's landscaping considered water-efficient and/or regionally appropriate?

[0.5 point]

Yes

O No

What percentage of the district's landscaping is considered water-efficient and/or regionally appropriate?

50% of the landscaping is water-efficient.

What types of water-efficient and/or regionally appropriate plants are used and where are they located? (500 characters maximum; ? characters used)

Water-efficient and/or regionally appropriate plants include grasses (Feather, Festuca, Mond ), succulents (Agaves, Aeomium, Echeveria, Euphorbia, Delospermam, Senecio), perennials (Agapanthus, Deites, Coyote bush, Gazania, Lantana, Salvias), trees (Arbutus, California Sycamore, Manzanita, Olive), and palms. The plants are located throughout the seven sites in our district.

#### Describe alternate water sources used for irrigation. (500 characters maximum; ? characters used) [0.5 point]

MBUSD uses reclaimed water which comes from sewage water that is treated at two different plants in the area. It is used at all but one site for irrigation.

### Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (500 characters maximum; ? characters used)

[0.5 point]

We use two systems at the high school to capture storm water. One is called a Bio-Swale that holds water in a drainage ditch and then percolates it through a gravel bed into the ground. The other is a linear storm drain system. This system retains water in a tank and allows it to also percolate into the ground. If the water going into it exceeds its capacity then the storm water goes through a filtration system before going into storm drains as run off.

### **Element IB - Water and Grounds**

(continued)

The district's drinking water comes from: [0.5 point]

Municipal water source

Well on school property

Other

Describe how the water source is protected from potential contaminants. (500 characters maximum; ? characters used)

The Water Division of the Public Works Department ensures that the City's water supply is of the highest quality and meets state and federal water quality requirements. Water treatment in the City of Manhattan Beach consists of supplemental chlorination and blending of the City's imported and well waters. The City's Water Plant Operators sample water weekly through an independent laboratory. Manhattan Beach maintains an excellent record for having provided sage, high-quality water to its residents.

### Describe the program in place to control lead in drinking water. (500 characters maximum; ? characters used) [0.5 point]

A lead ban was enacted by congress in 1986 for public buildings. All renovated/new school buildings comply with this ban. The schools not renovated (2 sites) use a water filtration system on all of their drinking fountains consisting of tri-stage filters. When the filter cartridges are used up they are recycled through Body Glove. They reduce chlorine, cysts, rust, sediment, mold and algae, lime scale, asbestos fibers, iron, manganese and lead. All filtration exceeds NSF requirements.

### What percentage of the district's grounds are devoted to ecologically beneficial uses (such as rain gardens, wildlife or native plant habitat, outdoor classrooms)?

[0.5 point]

#### Describe uses. (500 characters maximum; ? characters used)

Elementary schools have school gardens serving as outdoor classrooms. Each school has fields that are used for instruction in PE or science. PTAs and Earth Clubs have restored native plant habitats to campuses. Boy Scout Eagle projects added outdoor space to two schools. MBUSD hosts the Manhattan Beach Botanical Gardens, which serve as an amazing natural resource for the entire community. "Ecoland" is a long-treasured garden/wildlife habitat between classroom wings in our high school.

### Element IC - Waste [5 points total]

What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling, and/or composting? (complete all of the calculations below)

[up to 0.5 point]

40% is the recycling rate.

Is service stopped or reduced during non-service times?

- Yes
- O No

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

#### 882 CubicYards

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

#### 570 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)

6.5 CubicYards

Recycling rate: ((B+C)/(A+B+C))x100)

40%

Monthly waste generated per person: (A/number of students and staff)

.11 cubic yard

### Element IC - Waste

### (continued)

What percentage of your district's total office/classroom paper content is postconsumer material, fiber from forests certified as responsibly managed, and/or chlorine-free?

### [0.5 point]

70% chlorine free, 100% fiber from forest responsibly managed, 0% post consumer material.

List the amounts of hazardous materials used in your district, including specific products and how they are measured and disposed of properly.

[0.25 point]

Flammable liquids:	Paint is picked up by a third party vendor and all new paint is water based paint not requiring the use of solvents for cleanup.		
Corrosive liquids:	Lead acid batteries (electric car batteries) go back to the battery supplier.		
Toxics:	Nominal lab chemicals go through hazardous waste (picked up a few times a year); toner/cartridges go back to the supplier for recycling.		
Mercury:	Lamps are recycled through an environmental recycling company and all lighting district wide is being converted to LED.		

How have you reduced your hazardous waste generation (lbs/person/year)? (500 characters maximum; ? characters used) [0.75 point]

We have reduced our hazardous waste generation by purchasing ecologically-safe materials whenever possible. Nominal lab chemicals go through hazardous waste (picked up a few times a year); toner/cartridges go back to the supplier for recycling. We are in the process of replacing all lamps in the district with LED lamps, thus eliminating the hazardous waste in the district to almost zero. Time period measured: (mm/yy - mm/yy) (10/11 - 10/14)

### **Element IC - Waste**

(continued)

How is the district's waste disposal and recycling tracked? (500 characters maximum; ? characters used) [0.5 point] During Grades of Green Certification eco-audits, custodians at each school were asked to report the school's waste numbers. For middle and high schools, Grades of Green had grant funding to provide permanent recycle/sorting station containers. The waste disposal was tracked before and after the grant. For this application, the Waste Management pick-up schedule was reviewed to confirm numbers per the custodian reports.

Describe other progress and measures taken to reduce solid waste and elimination of hazardous waste. (500 characters maximum; ? characters used)

#### [0.5 point]

Since 2007 all five elementary schools have had trash free lunch programs, sorting liquids, recycle, compost, tray stacking, while encouraging packing trash free lunches. Two Elementary schools are using their paper trays for composting, and the 3 other schools recycle them. The middle school started waste sorting in 2012; the high school began recycling campus wide in 2014. The district is in process of replacing all lights with LED lights, thus reducing nearly all hazardous waste in the district.

## Element IC - Waste (continued)

Describe your district's green cleaning custodial program, including green cleaning products, services, advanced equipment, and/or policies. (500 characters maximum; ? characters used)

[0.75 point]

MBUSD uses Johnsons and Diversey green seal certified cleaners that use a system that ensures proper dilution ratio. All paper products are made from rapidly renewable fiber (managed forests) and are bleach free. The district has floor scrubbing machines that do not use chemicals to strip wax off of vinyl surfaces. The district has several new tile floor scrubbing machines that reduce the use of water and cleaning products. Our carpet cleaning machines use steam and organic solutions to clean.

### What percentage of all cleaning products is third-party-certified as green? [0.5 point]

71%, according to 'Green Gauge analysis by our distributor Unisource (Leed based).

What specific third-party-certified green cleaning product standard does your district use? (500 characters maximum; ? characters used)

[0.25 point]

We use Green Seal Certified and EcoLogo Certified cleaning products, chemicals, toilet paper, paper towels and hand soap. Deversey is our primary brand.

## Element IC - Waste (continued)

Describe how your district is implementing Environmentally Preferable Purchasing/Green Purchasing or products and equipment for administration, instruction, and/or maintenance. (1,000 characters maximum; ? characters used) [0.5 point]

MBUSD's Operation Manual (Manhattan Beach USD/BP3510) states that the district will purchase and use environmentally preferable products and services whenever practical, including, but not limited to, products that minimize environmental impacts, toxins, pollutants, odors and hazards, contain post consumer recycled content, conserve energy and water and produce a low amount of waste. Additionally, the Manual states that the district will use least toxic, independently certified green cleaning products when feasible, as well as high efficiency cleaning equipment that reduces the need to use chemicals. Every new piece of equipment we buy is evaluated for energy efficiency. We purchase only bamboo based toilet paper, which is 100% sustainable, and paper from rapidly renewable fibers. Mulch mowers have been purchased and are utilized at all sites. We review Unisource's 'Green Gauge Analysis' on a regular basis to evaluate/improve our purchase of green certified cleaning products.

### Element ID - Alternative Transportation [5 points total]

What percentage of district studen [up to 1 point]	ts take the following to get to/from school?	
Walk	28%	
Bicvcle/scooter/skateboard	5%	

Carpool (2+ students in the car)

School bus

Other public transportation

288		
5%		
17%		
<1%		
<1%		

Describe how these percentages were collected and calculated. (500 characters maximum; ? characters used)

The percentages were collected by giving each principal at the seven schools a half page survey to distribute to their teachers. The surveys were completed by each teacher asking their students how many of them walked, rolled, carpooled or were driven solo to school. Completed surveys were sent via the office manager to the district office. A parent volunteer entered the data on an excel spread sheet and calculated the final percentages.

Has your district implemented any of the following? (Check all that apply) [up to 1 point]

- Designated carpool parking stalls.
- A well-publicized no-idling policy that applies to all vehicles (including school buses that are required to meet the California Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools Regulation).
- Vehicle loading/unloading areas are at least 25 feet from building intakes, doors, and windows.
- Safe Pedestrian Routes to School or Safe Routes to School.
- Electric vehicle charging stations have been installed to encourage the use of these vehicles.
- Secure bicycle storage (such as bicycle lockers, racks, or rooms) is provided to encourage bicycling to school.

### Describe activities in your safe routes program. (1,000 characters maximum; ? characters used) [1 point]

The district encourages students to walk and bicycle to school. The Walking School Bus program, where groups of children walk to school with one or more adults in an organized way, is running in all of the five elementary schools. To ensure safe walking routes to school for the students, MBUSD collaborates with City officials to determine needs for new crosswalks, stop signs, crossing guards and other measures to facilitate safe walking. School administrators publicize recommended walking routes. The infrastructure around the schools, including signage and crosswalks, is conducive to walking or riding bikes. Crossing guards are stationed at major streets in the district. Banners and signs have been deployed at school sites to remind drivers of the no idling policy, and parent and school leaders also include reminders in the e-bulletins sent to all parents. Vehicle loading/unloading areas are at least 25 feet from building intakes, doors, and windows. Bike racks are provided.

Describe how your district transportation use is efficient and has reduced its environmental impact. (250 characters maximum; ? characters used)

[1 point]

The district uses electric vehicles for its on-campus transportation at all schools. The district does not offer bus transportation and encourages all students to walk/bike to school. Walking School Bus programs are used at all elementary schools.

## Element ID - Alternative Transportation (continued)

Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (1,000 characters maximum; ? characters used)

[1 point]

From 2009-2011, the district held a citywide Walk to School Parade on Earth Day. Elementary schools sponsor contests at school to encourage walking and carpooling (highest walk/carpool %). Elementary schools routinely advertise Walk to School Wednesdays and offer incentives to encourage walking to school. Students are encouraged to use the Walking School Bus program in their neighborhood to walk to school. All schools post signs to encourage cars to reduce idling. Carpooling is encouraged and facilitated by the district including offering an e-bulletin board on the high school website to allow carpoolers to connect.

### Congratulations!

You have completed Pillar I. Please make sure that you save your application often. You may revisit the Pillar I questions at any time until you submit your application.

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

### Element IIA - Environmental Health [15 points total]

Describe your district's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspections, pest identification, monitoring, recordkeeping, etc. (500 characters maximum; ? characters used) [up to 1 point]

EcoPesticides are applied by an outside contractor for the control of bug invasions. We use traps and bait stations for pests along with keeping all vegetation away from buildings. We also have a tree trimming program to keep tree branches away from buildings.

What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use. (250 characters maximum; ? characters used)

[up to 1 point]

The district uses 0.02721 gal diluted product(dilution ratio is 4 oz/gal)/student/year. Weed control products were reduced from 7 to 3. We converted 2 gardens into native plants gardens. Our high school football field (2008) and one elementary field (2012) were converted to turf.

Our district has a written integrated pest management plan.

[1 point]

Yes

O No

## Element IIA - Environmental Health (continued)

Which of the following practices does your district employ to minimize exposure to hazardous contaminants? (check all that apply)

[up to 3 points]

- Our district prohibits smoking on campus and in public school buses.
- In the second second
- Our district uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO).
- Our district does not have any fuel burning combustion appliances.
- Our district adheres to the Asbestos Act and has an asbestos management plan in place.
- Our district 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 schools were built with radon resistant construction features and tested to confirm levels below 4 pCi/L.
- Our district has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.
- Our district 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 products including less toxic art supplies, and selecting third-party-certified green cleaning products.

**Provide specific examples of actions taken for each checked practice above.** (1,000 characters maximum for all examples provided for practices highlighted; ? characters used)

Signage prohibiting smoking is in place on all buildings and entrances. All campuses are designated tobacco free zones. All fluorescent lights are being replaced with LED lighting. We don't use fuel burning combustion appliances. MBUSD's asbestos management plan is in place and reviewed periodically. AHERA reports on asbestos are completed in the required timeframe. MBUSD does not have any wood playground structures since 1998. MBUSD's Operation Manual mandates that MBUSD purchases and uses environmentally preferable products and least toxic, independently certified green cleaning products, and high efficiency cleaning equipment that reduces chemicals use. All paints are kept off site and cleaning products and science lab chemicals are stored in locked cabinets. Light bulbs and 95% of our paint are stored at the Maintenance & Operations yard in a locked shed. The other 5% is stored in locked fireproof cabinets. Lab chemicals are stored on site in prep rooms in special cabinets.

### Element IIA - Environmental Health

(continued)

What percentage of district classrooms employ the following indoor environmental standards? [up to 1 point]

Good acoustics (less than 45 dBA):	90%
Good daylighting and high-quality electrica light when needed:	al 75%
Good relative humidity control (ASHRAE 30-60%):	75%

Provide specific examples of actions taken for each checked practice above. (1,000 characters maximum for all examples provided for practices highlighted; ? characters used)

Since all of our schools are in residential areas, 90% of our school classrooms have good acoustics (under 45dBa). 75% of our classrooms have high quality lighting and good day lighting. 75% of our classrooms have relative humidity of ASHRAE 30-60%. The new and renovated buildings also have daylight sensors that reduce the light output when outside lighting is adequate. The newest high school building has a state of the art HVAC management system that utilizes outside air to condition the rooms.

Describe how your district controls and manages chemicals routinely used in schools to minimize student and staff

### exposure. (1,000 characters maximum; ? characters used) [up to 1 point]

MBUSD uses sustainable, non-toxic and environmentally friendly products such as organic pest control chemicals, ecc-safe pest reduction products, and green cleaning supplies. Herbicides are applied only during holiday breaks with no students present for a significant amount of time. District policy prohibits children from entering a treated area for at least 48 hours after the treatment or longer if required by the pesticide label.

Describe the steps your district has taken to ensure that all district and school site buildings are lead-safe. (500 characters maximum; ? characters used)

[up to 1 point]

Every three years an AHERA (Asbestos, Hazardous Emergency Response Act) investigation is conducted and a report is issued. Additionally, every six months there is a check-up of the AHERA by an environmental contractor. All construction materials are tested by an outside environmental contractor and any (hot) material is abated by a certified abatement contractor, prior to demolition to prevent airborne contamination.

## Element IIA - Environmental Health (continued)

Describe actions your district takes to prevent exposure to asthma triggers in and around schools. (1,000 characters maximum; ? characters used)

[up to 1 point]

MBUSD purchases/uses environmentally-safe cleaning products, regularly maintains HVAC units, prohibits tobacco-use, provides adequate ventilation and indoor air quality, limits outdoor exposure when poor air quality (smog, etc.), enforces no idling zones near schools, uses products that reduce dust, mold and mildew, utilizes an integrated pest management system, uses HEPA vacuums, and tints windows instead of using dust-collecting blinds in some classrooms. Carpet has been removed from some rooms, to accommodate students with asthma.

Describe actions your district takes to control moisture from leaks, condensation, and excess humidity and to promptly clean up mold or remove moldy materials when found. (1,000 characters maximum; ? characters used) [up to 1 point]

All roofs are inspected annually and any report of mold is investigated immediately and if found in place, tested and remediated through accredited outside contractors. Since our district is located in Southern California, humidity is relatively low.

### **Element IIA - Environmental Health**

(continued)

Local exhaust systems for major airborne contaminant sources have been installed district-wide. [1 point]

Yes

No

Describe your district's practices for inspecting and maintaining the buildings' ventilation systems and all unit ventilators to ensure they are clean and operating properly. (1,000 characters maximum; ? characters used) [up to 1 point]

All new buildings utilize lab hood ventilation systems and exhaust systems to keep airborne contamination out of the classrooms. We do not perform lab experiments at the K-5 level that produce major contaminates (only at the high school and middle school where exhaust systems are in place). All other classrooms use HVAC systems that incorporate air exchanges according to regulations. A comprehensive HVAC maintenance schedule is in place for units in each of the district's buildings that includes changing filters, cleaning various coils, and inspecting fans, motors and air ducts. Portable classroom filters are changed quarterly and coil and ducts cleaned annually. All large HVAC systems are on a preventative maintenance program through an outside HVAC contractor quarterly.

Describe actions your district 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. (1,000 characters maximum; ? characters used)

[up to 1 point]

All new HVAC units are equipped with CO2 sensors, thermostats and fans to monitor and circulate the air to meet Title 24 standards. All of our older buildings incorporate standard outside air circulation and have good cross flow/draft ventilation.

### Element IIA - Environmental Health (continued)

Describe other steps your district 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. (1,000 characters maximum; ? characters used) [up to 1 point]

MBUSD utilizes IAQ Tools for Schools to formulate, implement, maintain and enhance its policies, regulations and programs relating to environmental health and safety issues. The district also adheres to guidelines that promote green school practices and its master plan incorporates green technology and products into its renovations and daily operations. Regular inspections and maintenance are conducted on systems to preserve indoor environmental quality and repairs and/or replacement is made when problems are identified.

Element	IIB -	Nutrition	and	Fitness
[15 points	s tota	al]		

Provide the number and percentage of schools within the district for all practices below that promote nutrition. (example: 4 schools, 25%)

[up to 2 points]

Schools have been recognized in the USDA's Healthier US School Challenge and/or Alliance for a Healthier Generation; provide level and	
	0 schools, 0%,
year.	
Schools participate in a Farm to School program to use local, fresh food.	5 schools, 71%
Schools have on-site food gardens.	5 schools, 71%
School gardens supply food for students in the	
cafeteria, a cooking or garden class, or to their	5 schools, 71%
community.	

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

[up to 2 points]

- 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.
- Health measures are integrated into assessments.
- It he district wellness policy addresses positive environmental and health impacts that have helped green our schools.
- Our wellness policies and practices extend into afterschool programs and/or activities.
- At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).
- The food purchased by our district is certified as environmentally preferable; provide the percentage and type in space below.
- Our district has an active wellness committee.
- Qur district provides staff, students, and families information on nutrition education and/or programs.

Provide specific examples of actions taken for each practice, focusing on innovative or unique practices and partnerships for each checked practice. (1,000 characters maximum for all examples provided for practices highlighted; ? characters used)

100% of our students PE takes place outdoors, 200 minutes a week PE/outdoor activities for grades K-5, 400 minutes a week for grades 6-12. MBUSD Wellness Policy promotes healthy activity and eating habits and outlines best practices. California Healthy Kids Survey is done annually. School sponsored activities and after school enrichment programs follow district wellness policies. PE teachers incorporate sunscreen information in their lessons. 30%-40% of produce is locally grown. MBUSD Wellness Committee meets three times a year. This committee reviews policies and practices related to health and safety and makes policy suggestions. Our Medical Advisory Board reviews all policy and practices related to the medical needs of students. All elementary schools participate in Growing Great, it sends material home to parents to supplement classrooms lessons. The MBUSD Food & Nutrition website provides information regarding nutrition. A monthly newsletter with health tips is issued.

### **Element IIB - Nutrition and Fitness**

### (continued)

Describe the type of outdoor education, exercise, and recreation available, including time spent in gardens. (1,000 characters maximum; ? characters used)

[up to 1.5 points]

In our district, grades K-5 have 100 minutes per week of formal PE, and another 100 minutes per week of school supervised play time, all outdoors. Grades 6-12 spend 400 minutes per week in outdoor supervised physical education. Run Clubs at each elementary school and PTA sponsored fun runs supplement outdoor physical education. All five elementary schools participate in the Growing Great Garden program and students actively harvest, weed, haul, plant, and turn soil. On average, every child in our elementary schools spends 4 half hours a year in the school garden.

Describe the efforts being made to increase staff wellness in the areas of access to fresh fruits and vegetables and increased physical activity. (1,000 characters maximum; ? characters used) [up to 1.5 points]

All five elementary schools implement Growing Great curriculum in classroom nutrition and garden lessons and supplement these lessons with lessons for teachers to incorporate in their classrooms. Additionally the MBUSD Wellness Committee organizes and promotes a 'Step Challenge' every April, in which staff members are encouraged to measure the amount of steps they take daily. Because MBUSD purchases 30-40% of produce from local sources and provides healthy meals incorporating all five food groups, school staff has access to freshly prepared meals and many of these meals are comprised of fresh vegetables and fruits, whole grains and legumes.

Describe any other district-wide efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships with local growers, businesses, and community partners. (1,000 characters maximum; ? characters used)

[up to 2 points]

MBUSD Food & Nutrition Services creates a variety of freshly prepared meals on a daily basis. The goal is to provide healthy meals from all five food groups without giving up taste or value. Our meals are either cooked from scratch or we use the speed-scratch method. 100% of milk is locally sourced. We also purchase locally grown fruits and vegetables as often as possible. 30%-40% of produce is locally grown. As for our paper goods, we do not use any products containing polystyrene. We purchase and use recyclable, compostable and biodegradable paper goods even if the cost is higher. In our kitchens, cans and other containers are separated and disposed of in proper recycling receptacles.

### **Element IIB - Nutrition and Fitness**

(continued)

Does your district use a Coordinated School Health approach or other health-related initiatives to address overall school health issues?

[up to 2 points]

Yes

No

If yes, describe the health-related initiatives or approaches used by the district. (1,000 characters maximum; ? characters used)

MBUSD has adopted a Health and Wellness Policy which promotes healthy activity and eating habits and outlines best practices. Our Health and Safety Committee and Medical Advisory Board meet regularly to review healthrelated policy and advise MBUSD on policies and practices related to health issues and safety. MBUSD staffs each school with medical professionals who work together regarding overall district health. Additionally, MBUSD has partnered with Beach Cities Health District (MindUp, Healthy Kids Survey), Blue Zones (Healthy School Pledge). Growing Great (Harvest of the Month, Famer's Market) and Grades of Green (Walk to School promotion) to supplement our health-related initiatives. The district supports run clubs, extracurricular clubs/athletics and other activities.

Does your district partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety? [up to 2 points]

Yes

100

No

If yes, describe these partnerships. (1,000 characters maximum; ? characters used)

MBUSD partners with Beach Cities Health District, a government agency dedicated to providing preventive health services to the community. Through this partnership we have access to professionals that are able to advise us on some of our Health and Wellness policies. We are also members of SNA-School Nutrition Association and CSNA-California School Nutrition Association with whom we meet regularly to learn about our industry and new products that students will enjoy as well as best practices. MBUSD additionally partners with Growing Great and incorporates nutrition lessons and garden lessons into the curriculum in all 5 elementary schools. Grades of Green provides assemblies and environmental curriculum at all five elementary schools. Twenty teachers are piloting the 'MindUp' program in the district. All other teachers will be trained in the spring of 2015. The MindUp curriculum helps K-8th children improve focus, reduce stress, handle conflicts, and develop greater empathy toward others.

Does your district have full-time school nurses and/or school-based health centers? [0.5 point]

• Yes

103

No

If yes, describe these programs by site. (500 characters maximum; ? characters used)

MBUSD has 2 full time district nurses that are on call for all sites. At each of the 7 school sites we have health clerks.

Describe your district's efforts to support student mental health and school climate (e.g., anti-bullying programs, peer counseling, etc.). (1,000 characters maximum; ? characters used)

#### [up to 1.5 points]

The Safe School Ambassadors program, a nationally recognized anti-bullying program is used at all the elementary schools and the middle school. A national program, Character Counts, is also used at our schools through a 5 pillar approach highlighting different character traits each month. PACE (People Acquiring Complete Equality) is a program utilized at the high school to train students to facilitate assemblies, conduct panels, workshops and discussion groups in the areas of Drug Awareness, Peer Outreach, Respect and Conflict Mediation. Other MEUSD programs include the Ambassador Program and Lunch Bunch, which provide lunchtime and recess anti-bullying assistance, Friendship Circle, which assigns mentors to special needs students, and Service Learning community service. Assemblies are organized by PTA's throughout the district to educate parents and students regarding drugs, alcohol and bullying.

#### Congratulations!

You have completed Pillar II. Please make sure that you save your application often. You may revisit the Pillar II questions at any time until you submit your application.

### Pillar III: Effective Environmental and Sustainability Education

### Element IIIA - Interdisciplinary Learning [20 points total]

Which practices does your district employ to help ensure effective environmental and sustainability education? [up to 5 points]

- A written definition of environmental literacy.
- An environmental or sustainability literacy requirement.
- Integration of environmental and sustainability concepts across the curriculum in multiple disciplines.
- An environmental or sustainability elective course.
- An AP Environmental Science course (high schools only).
- An environmental or sustainability student club.
- An assessment of environmental and sustainability learning and achievement.
- Professional development in environmental and sustainability education for all teachers.

# Provide specific examples of actions taken for each practice employed, highlighting innovative or unique practices and partnerships for each checked practice. (6,000 characters maximum for all examples provided for practices highlighted; ? characters used)

[up to 15 points]

- MBUSD defines environmental literacy in Board Policy 6142.5, which states, "The goal of the district's environmental education program shall be to provide students with an understanding of the interactions and interdependence of human societies and natural systems, the ways that natural systems change and how people can benefit and influence that change, the fact that there are no boundaries to prevent matter from flowing between systems, and the fact that decisions affecting resources and natural systems are complex and involve many factors." -While there is no specific graduation requirement for environmental literacy, it is built into the standards and practices throughout the K-12 curriculum. - World environmental issues are discussed intensely in our Model United Nations high school classes. In these courses, students learn to debate controversial topics from the perspectives of different nations. Some of the environmental issues that Mira Costa students have debated include natural disasters in India, illegal trade in rain forest lumber, preservation of rainforests in South America, accountability for environmental damage, water conservation in under-developed nations, future global energy solutions, green technology energy solutions, natural disaster relief, waste management and the environment, resource trafficking, climate change, indigenous people in the Arctic environment (Carbon Footprint), resource protection for indigenous people, global energy solutions and water conservation. - In the middle school, there are two extremely popular electives in Science, Technology, Engineering and Math (STEM). The environment and biofuels are major topics of discussion in these classes. The high school additionally has three sections of a Marine Science elective. In this course students study the marine environment including physical oceanography, marine biology, and applied marine ecology. - The District approved AP Environmental Science as a new course four years ago, and it is now one of our most popular and most requested AP courses. Mira Costa High School offers the course five periods during the school day. - All schools in the district have clubs that incorporate environmental issues in their mission. Three elementary schools have Earth Clubs, two of which are led by the Green Representative on their Student Council. The other two elementaries have 5th grade Student Council/Ambassadors Clubs that are responsible for classroom recycling. Several elementary schools also have garden clubs. The middle school has the Green Team. The high school has an Ecology Club (mission: advocate for and complete projects that help the environment), Blue Zones Club (mission: healthy living), Grades of Green Club (mission: environmental sustainability), Disney Club for Change (mission: help raise funds and awareness about the environment). - MBUSD retained Grades of Green to conduct an eco-audit of its eight campuses to assess environmental and sustainability learning and achievement. - Teachers attend assemblies, science fairs and garden, nutrition, and environmental lessons taught by Grades of Green and Growing Great docents. - The high school Grades of Green team sponsored a flash mob to draw attention and roll out its new recycling program in spring 2014. - The middle school STEM students participate in a science fair sponsored by Aerospace, a company located in the nearby community of El Segundo. All projects cover topics relating to alternative energies and local environmental issues. - The middle school Student Council sponsors a weekly recycling competition between classes. - Two schools' Green Team set up the recess area with recycle cans next to the trash cans. They played recycle relays to reinforce proper use of the new recycle cans on the playground. - Three schools' film students created a video starring the Green Team demonstrating the sorting system. It was shown in classrooms school

wide. - The Ecology Club at the high school built an Eco Land including a greenhouse, pond, chicken coops, and garden with composters. - The STEM students design and build self sustaining eco-columns. The columns are used to do water quality testing, study decomposition (composting), and to discuss bioaccumulation. - Student clubs and Student Councils participate in Pride Days held at all district campuses to remove ice plant and other non-native plants and replace those plants with native gardens. - Grand View's Earth Club presented to the School Board on ways to conserve water for the District.

### Element IIIB - STEM Content, Knowledge, and Skills [5 points total]

How does your district use sustainability and the environment as a context for learning science, technology, engineering, and mathematics thinking skills and content knowledge? (2,000 characters maximum; ? characters used) [up to 2.5 points]

- Makerspace, a creative open space, is in place at all of our elementary schools. Students use recycled or reused materials to build innovative projects. - Elementary student council/Ambassadors/Earth Clubs, the Middle School Green Team and high school clubs develop sustainability ideas as well as Earth Week educational materials for students. - 4th grade students district-wide study the effects of human interaction on the environment. They also study various biomes and their fragile inter-dependent systems and the use of (non) renewable resources. Kindergartens district-wide studies the movement from farm to table and visit Grow, a local produce store, as a field trip. - All elementary schools schedule field trips to Manhattan Beach Roundhouse Aquarium where they learn about the marine environment and their impact on that environment. Additional environment-based field trips are scheduled to the LA Zoo, Tumbleweed, Abalone Cove, and the Ballona Wetlands. - For the past seven years, one of our elementary schools provides lessons to its students through the Grades of Green 3R Environmental Education program. 30 docents attend 3 workshops per year to teach the hands-on environmental lessons which align with CA State Science Standards. - Most of our elementary schools sponsor environmental-based assemblies. Over the last four years these have included Recycle Rex, Heal the Bay's Watershed Protection, Environmental Defenders and Windows into the Water. - Our 6th graders attend Science School at PALL, an outcoor education school in the local mountains, where curriculum for the week includes the environment and sustainability. All elementary schools utilize the Growing Great Garden and Nutrition Program curriculum. Students grow vegetables in on-campus gardens, tend gardens, harvest, sample produce, serve produce to all students, and host farmer's markets. They receive lessons at each grade level complying CA State Math, Science and Social Studies Standards.

### How does your district use sustainability and the environment as a context for learning green technologies and career pathways? (2,000 characters maximum; ? characters used)

[up to 2.5 points]

- Students learn about green technologies through composting and recycling programs organized and maintained by Student Council, Earth Clubs, Ambassador Clubs, and Grades of Green Clubs and parent volunteers. - All 6th grade students research alternative energy sources, write a paper and present their research to the class. - Science Fairs in all elementary schools and science projects in STEM classes give students the opportunity to explore, research, and develop greener technologies. - Through field trips to Ballona wetlands, Roundhouse Aquarium, Abalone Cove, LA County Zoo, Tree Musketeers, Ecostation, Grow, and interaction with their staff, students are exposed to environmental career pathways. - Students harvest and help sell garden vegetables at school farmer's markets sponsored by Growing Great. - All grades K-8th participate in a docent-led Young at Art program. Many projects use found objects and utilize recycled objects to create art.

### Element IIIC - Civic Knowledge and Skills [10 points total]

Describe students' civic/community engagement projects integrating environment and sustainability concepts and specify at which grade level each is implemented. (2,000 characters maximum; ? characters used) [up to 2 points]

-In January 2009, a group of 40 3rd to 8th grade students representing all elementary schools and the middle school asked the Manhattan Beach City Council to ban single use plastic bags and Styrofoam. Each student gave their reason why they wanted the bans. The City banned the plastic bag but was later sued by the "Save the Plastic Bag" coalition. The case went to the California Supreme Court and the City of Manhattan Beach won. This is a landmark case started by the students which allowed smaller cities to ban the plastic bag without an Environmental Impact Report. - In 2014, five District students spoke in partnership with Surfrider Organization to convince the City Council to add an amendment to the current Styrofoam Ban to make it the strictest ban in the country. The amendment passed unanimously. - Students at all schools participate in city-wide Earth Day festivities at Polliwog Park. - Parents and students have participated on the City's Environmental Task Force; this partnership further supports the schools going green. At the direction of the Task Force, a new waste hauler contract was negotiated to include free recycling dumpsters and containers for all schools. It also includes free educational assemblies. - The City has provided funding for student gardens and purchased composters for schools. - The City includes students in its sustainability efforts. Students participate at events such as "Bag the Bag", TedX, Earth Day, Watt Watchers, city council meetings, and award ceremonies.

#### Describe students' meaningful outdoor learning experiences at every grade level. (2,000 characters maximum; ? characters used) [up to 2 points]

All elementary students have outdoor instructional time in the Growing Great Gardens at each school. Students receive lessons on the environment (water conservation lessons, composting), farming industry (planting, tending, harvesting, sustainability), and nutrition all linked to academic standards in math, science, language arts, and social science. All district schools utilize outdoor tables and classroom areas. All elementary students utilize outdoor patio areas adjacent to classrooms for nature studies, science workshops, science labs, reading, writing and art projects.Pennekamp Elementary has a dedicated outdoor classroom; learning activities include growing butterflies and bean seeds and launching rockets. Grandview Elementary uses outdoor open space for Grades of Green docent-led environmental activities. Meadows Elementary 5th graders use outdoor venues to create conservation projects; topics include watersheds. Robinson Elementary utilize spaces outside the classrooms for themed activities that enhance curriculum. MIddle school film students use outdoor areas of the school as creative venues for projects. The high school uses an outdoor classroom on the roof of the Math/Science building for lab activities. K-6 students across the district take meaningful outdoor field trips: K - Round House Marine Studies Lab and Aquarium and Grow the Produce Shop 1st Grade - Tree People, LA County Zoo, Long Beach Aquarium 2nd Grade - Underwood Farms and a Whale Watch 3rd Grade - Camp Tumbleweed, Ballona Wetlands, LA Science Center 4th Grade - Riley Farm 5th Grade - Water Recycling Tour, Redondo Beach SEA Lab, Abalone Cove tide pools, Catalina Marine Institute Science Camp (overnight) 6th Grade- Pali Institute Science Camp - one week

## Element IIIC - Civic Knowledge and Skills (continued)

Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (include additional information in your narrative; 2,000 characters maximum; ? characters used) [up to 2 points]

- Growing Great Gardens educate students on the environment (water conservation lessons) and the farming industry (planting, tending, harvesting, sustainability), all linked to academic standards in math, science, language arts, and social science. MBUSD students grow vegetables in on-campus gardens, tend to gardens during season, harvest, sample produce, serve produce to all students, and host school farmer's markets to give back to community and promote whole foods. - Three elementary schools have community gardens and the members of those gardens assist in gardening lessons. - Field trips to local venues including the Manhattan Beach Roundhouse Aquarium reinforced awareness of students' impact on the environment and triggered participation in local environmental initiatives, which led to the ban on plastic bags in Manhattan Beach in 2009. - Film students use outdoor venues to create teaching videos on topics such as sorting trash and the impact of trash on the environment, which are shared with other students and members of the community. - Grades of Green's Youth Corp program builds student environmental leadership by having members choose a green project to implement at their school. Some examples of projects: A Meadows student took photos of students caught in the act of being green and posted on the school bulletin board. A Grand View student is organizing and leading a beach clean up with his school and the community. Two middle school student led projects: one student led two e-waste drives diverting over 23,000 lbs. of e-waste from the landfills and another student connected with her local resources and experts to plant a native garden at the Middle school. A high school student spoke at local conferences teaching about waste reduction. - Participation in local beach cleanups through Heal the Bay created awareness of the significant impact of cigarettes on our beaches and has been an impetus push for a smoking ban in Manhattan Beach.

# Describe partnerships with the local community (e.g., academic, business, government, non-profit, and non-formal science institutions) that help advance the district and the greater community toward the Three Pillars. (2,000 characters maximum; ? characters used)

[up to 2 points]

- District students attend annual beach clean-ups hosted by Heal the Bay. - At the Farmers Market Grades of Green invites K - 8 grade students to play a scavenger hunt game that demonstrates green habits: buying local, composting, recycling, etc.. - Leadership Manhattan Beach purchased Big Belly trash and recycle containers for an elementary school and the main baseball field. They put bike racks around town and planted a native garden. The Boy Scouts built a composter and an outdoor classroom. Boy Scouts and Girl Scouts have planted drought resistant plants during Pride Day at all campuses. The Girl Scouts built chalkboards to display information in a reusable format. - In 2011, Beach Cities Health District created the Walking School Bus program and all elementary schools participate. Beach Cities also funds counselors and recycling and sponsors the MindUp program currently being implemented in district schools. - Grades of Green's Youth Corp program builds student leadership by having members choose a green project to implement at their school. - All elementary students participate in the garden and nutrition program developed by Growing Great. - Local businesses Chevron, Wells Fargo, Grow, Fresh Brothers, 3 Ball Productions and the Murad Company have given time, money and support to green efforts. - Young at Art docents teach children art modelling projects after the masters and utilizing found objects and recycled material. - Blue Zones sponsors Healthy Kids surveys and encourages healthy lifestyle choices through education programs and competitions between schools. - The City of Manhattan Beach has been instrumental in providing funding to build gardens at several elementary schools as well as organizing yearly Earth Day festivities. - Waste Management provides each 1st grade student in the district a Go Green Lunch Box. They have given grants to Grades of Green to provide environmental education for the district during the past six years.

### Element IIIC - Civic Knowledge and Skills (continued)

Distinguish any other programs or features not included in the application that demonstrate ways that your district integrates core environmental, sustainability, STEM, green technology, and civics into curricula while highlighting innovative or unique practices and partnerships that provide effective environmental and sustainability education. If applicable, include examples of the evolution of your program over time. (2,000 characters maximum; ? characters used) [up to 2 points]

- Many of our elementary schools sponsor Halloween costume recycling programs, toy and clothing drives and collect books and school supplies for underserved schools. One elementary school has a costume rental closet managed by the PTA. - A local mother started the Go Green Lunch Box company to provide a helpful solution to packing a trash free lunch. - Four elementary schools have programs to collect e-waste such as batteries, printer cartridges, small electronic devices, and phones. The middle and high schools hold e-waste fundraising

drives. - Waste Audits were conducted at the middle and high schools during which lunch waste was sorted to determine how much waste could be diverted from the landfill through recycling. The results were used to set diversion goals at both schools. 63% of the high school's waste and 40% of the middle school's waste could be diverted through recycling. Since implementing recycling campus wide, the high school has reduced landfill waste by 37%. - Many students feel passionate about caring for the environment and have made videos to express their passion including 'How to Sort Your Lunch Waste', 'Pack a Trash Free Lunch', 'The Importance of Picking up Litter', 'Reducing your Carbon Footprint' and 'Why it is Important to Care for the Environment'. Students have additionally created inspirational green songs. - Each school has an electronic newsletter to communicate with families, instead of paper. A monthly Earth Tip is provided to each school to post on a monthly basis aligned with timely events. - Environmental clubs sponsor Earth Week activities. Activities include: walking to school, packing trash free lunches, creating reuse art projects, completing environmental challenges to practice at home. - Joel Green, the host and producer of "Curiosity Quest Goes Green" filmed an entire episode of their PBS show at one of our elementary schools highlighting our best practices to show other schools how to go green.

### **Print Your Responses & Submit Your Application**

Thank you for taking the time to complete this application. Use the **Print Responses** button below to save a copy of your responses for your records.

Once you select the **Submit** button below, your application will be transmitted to CDE and you will be redirected to the CDE Green Ribbon Schools Web page.

CDE will send an email confirming receipt of your application within two business days. At this time, we will provide instructions by which you may submit ten photographs and up to ten minutes of video content to accompany your application. Photographs and video content will not be scored.