

# **School Nominee Presentation Form**

# ELIGIBILITY CERTIFICATIONS

#### **School and District's Certifications**

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.* 

- 1. The school has some configuration that includes grades Pre-K-12.
- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
- 3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
- 4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
- 5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
- 7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

# **U.S. Department of Education Green Ribbon Schools 2015-2018**

Public Charter Title I Magnet Private Independent Rural Name of Principal: **Dr. Nicholas Bruski** 

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

Official School Name: Montecito Union School District (As it should appear on an award) Official School Name Mailing Address: 385 San Ysidro Road, Santa Barbara, CA 93108 (If address is P.O. Box, also include street address.) County: Santa Barbara State School Code Number \*: 42 69252 0000000

Telephone: 805-969-3249 ext 400 Fax: 805-969-9714

Web site/URL: <u>www.montecitou.org</u> E-mail: <u>tmurphy@montecitou.org</u> \*Private Schools: If the information requested is not applicable, write N/A in the space

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

Date: 1/26/17

(Principal's Signature)



# GreenRibbonSchools

Name of Superintendent: Mrs. Tammy Murphy

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

### District Name: Montecito Union School District

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

Yammy Murphy

\_\_\_\_\_ Date: 1/26/17

(Superintendent's Signature)

# Nominating Authority's Certifications

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

- 1. The school has some configuration that includes grades Pre-K-12.
- 2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: California Department of Education

Name of Nominating Authority: **State Superintendent of Public Instruction Tom Torlakson** (Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

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\_\_\_\_\_Date: January 31, 2017

(Nominating Authority's Signature)

# SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.

# SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to <u>green.ribbon.schools@ed.gov</u> according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: March 31, 2018

#### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.





# Montecito Union School

California Nominee to U.S. Department of Education Green Ribbon Schools

U.S. DEPARTMENT OF EDUCATION



Prepared by California Department of Education School Facilities and Transportation Services Division http://www.cde.ca.gov/ls/fa/sf/greenribbonprog.asp January 2017

# PART II – SUMMARY OF ACHIEVEMENTS

# Montecito Union School, Santa Barbara, Calif. A comprehensive Sustainability Plan supports efforts across the Three Pillars

Montecito Union School (MUS) recognizes students as the future stewards of the environment and prepares them to be environmental advocates. In 2011, with foresight, the Board of Trustees in this single-school district approved a Sustainability Plan ("the PLAN") that set the stage for school greening efforts. A compilation of this work is offered publicly via the school's Web page. The PLAN is offered by MUS as a resource to assist any school on their journey to green.

The achievements of MUS across the Three Pillars earned California Green Ribbon Schools recognition in 2015 (Bronze Level) and 2016 (Gold Level). Efforts and successes guided by the PLAN objectives have reduced environmental impact and costs and taught the community that the health of our planet is interwoven with our own well-being. The PLAN has been an invaluable guide for sustainable systems and has helped MUS focus on the roadmap provided by the Three Pillars with programs such as improving composting and recycling efforts at lunchtime, invigorating the environmental education curriculum, and building partnerships in the community.

Conservation and future grid neutrality are ideas found in the MUS Facilities Master Plan (2012– 15), while "Environmental Stewardship" is a value found in the MUS Board's Strategic Plan. Board approval of the Sustainability Plan confirms the District's commitment to being "green." This two-time California Distinguished School (2014, 1997) consists of older buildings and a vintage infrastructure. Updating buildings and the aging electric infrastructure will enhance energy efficiency, meeting or exceeding California's green building code standards, CALGreen.

Funding from the *California Clean Energy Jobs Act* (Proposition 39) jumpstarted school investment in a high-efficiency LED lighting retrofit. Low-E safety film installed on windows in 2015 also helps with energy conservation.

MUS students are engaged in environmental awareness every day, from school-wide assemblies that encourage thoughtful management of resources, to lunchtime waste diversion, to a student-run campus-wide recycling waste audit, and on to leadership roles for Tech Club students who teach peers about online paperless document management. This year, a "green"-themed yearbook will proudly share greening efforts with the school community.

The school's Parent Teacher Association supplements environmental education curriculum by supporting an annual Earth Day celebration that includes hands-on green experiences from local businesses, non-profits, and UC Santa Barbara.

The science program is transitioning to the California Next Generation Science Standards by integrating STEM and environmental literacy components. Initiative #5 of the PLAN is to embed California's Environmental Principles & Concepts into the curriculum in order to "support MUS students in developing the knowledge, skills, and dispositions to become responsible stewards of the Earth…" For example, highlighting Principle 1 in 3<sup>rd</sup> grade, students no longer just study animal adaptations, but instead are posed the question, "How do we, as scientists and engineers, support our local wildlife through the drought?" Students then generate the questions they have about local wildlife, habitats, survival, human impacts, and the effects of the drought. Those questions are answered through research, labs, and a partnership with the Santa Barbara Wildlife Care Network.

The increased numbers of students and families walking to school regularly are proof that "green" values are present and growing at MUS. The school's Walk 'n Roll program started in 2010 in collaboration with the Safe Routes to School local director, the MUS Superintendent, the Green Team, and the MUS Transportation Safety Task Force. Reducing environmental impact from cars is the foundation of the program. The monthly PTA Newsletter and the Principal's weekly notes consistently encourage walking, biking, and carpooling to school. Throughout the year, students are credited for walking or biking. PTA offers fun incentives for student participation, including custom bag tags developed specifically for program. A Federal Safe Routes to School grant funded the San Ysidro Road Path to school and a myriad of environmental impacts were reduced. The multi-use path opened in 2012.

MUS students are active facilitators of campus sustainability goals and they are integral to the school's successes. Ongoing implementation of the PLAN will help students to be more environmentally conscious while at MUS and long into their future.

# PART III – DOCUMENTATION OF STATE EVALUATION OF SCHOOL NOMINEE

#### Pillar I: Reduce Environmental Impact and Costs

#### Element IA: Energy

- MUS designed a Facilities Master Plan (FMP) as a blueprint for building, maintenance, and energy conservation objectives. In 2016, fluorescent lights were replaced with highefficiency LED lights in seven classrooms. Additional energy efficiency changes are in progress; timers and LED wall packs with hoods are scheduled to be installed in early 2017. The FMP specifies standards including ENERGY STAR, CHPS-verified, and LEED opportunities, with a stated aim for the campus to be carbon neutral by 2030.
- MUS occupies a largely historic campus with the earliest building dating to 1926. Although the school has struggled to establish baseline data with an antiquated and complicated, but well-maintained infrastructure, including four electric meters, a comparative inventory will begin in Spring 2017. The FPM and PLAN goals, along with two prior years of participation in California Green Ribbon Schools, helped MUS to establish an energy reduction goal of 3% from last year.
- Funding from California's Proposition 39 provided funding to MUS for improved energy efficiency. An initial LED lighting retrofit has MUS moving toward campus-wide retrofits.
- MUS has established an energy use intensity baseline and goals using ENERGY STAR Portfolio Manager. MUS has an ENERGY STAR baseline score of 81.
- Green values permeate MUS endeavors and construction projects prioritize efficient systems and low-waste generation.
  - The Terrace Improvement Project, completed in 2015 in association with Little Landfill, resurfaced 12,000 square feet of play area with recycled on-site aggregate. Asphalt from the older ball courts was crushed and reused for base material. Essentially, the loop was closed, with resulting resource and cost savings. In addition, the play equipment was recycled and donated to a neighboring school district. A bioswale detention system was also created.
  - Another 2015 renovation involved carpet replacement. GREENGUARD certified carpet was used and the original material was sent back to the factory for repurposing, making the effort Cradle-to-Cradle.

- Also in 2015, energy efficiency and safety enhancements were achieved by placing UV film on old windows.
- Earlier garage/workshop and kitchenette renovations followed state and county codes for lead-free paint, insulation, and energy-efficient appliances.
- MUS has made multiple improvements to address the heat island effect on-campus, including:
  - Installing eight shade trees and a 300 square foot pergola in the lunch area;
  - Painting basketball courts with green reflective plexipave paint (2015);
  - Installing an 1,140 square foot permanent shade structure (2016); and
  - Reducing pavement by replacing a 1,500 square foot parking lot with native plants, crushed granite, permeable pavers, and a play area.
- The 5<sup>th</sup> grade classrooms were retrofitted with LED lighting this year as part of the energy efficiency program. MUS is optimistic that Proposition 39, which is dependent on state tax revenues, will be able to fund an LED retrofit for all MUS classrooms this year.
- Results of a 2008 Energy Audit defined action steps for reducing energy usage and upgrading appliances. Computers are programmed to go into sleep mode and power down completely when not in use. Staff are committed to turning off lights when rooms are unoccupied; 13% of classrooms have automatic light sensors. After MUS began participating in the ENERGY STAR Program, high priority was given to MUS energy use and behavioral shifts resulted in a reduction in energy use. MUS purchases ENERGY STAR labeled appliances and plumbing fixtures when a new unit is replaced or added within the facility.

#### Element IB: Water and Grounds

- MUS has accomplished a 30.7% water reduction from a 6,265 gallons/occupant/year baseline in 2012.
- The MUS facilities manager monitors the water use through monthly utility bills and imports the data into an Excel Spreadsheet. The water-use data is compiled and provided to MUS administration to review for any anomalies and to ensure water is used as efficiently as possible. The compiled data shows trends over time in addition to calculating the reduction in water use.
- The facilities team consisting of custodians, gardening, and maintenance personnel physically check water meters weekly while school premises are vacant to monitor water use as a means of detecting leaks. School personnel pays close attention to appropriate water use and conservation; leaks or malfunctions of any kind are reported and repaired immediately.
- Rainwater from the roofs is redirected off the pavement and into landscaping areas. Last summer, drainage of rainwater onto adjacent parking lots and streets was addressed as part of the basketball court resurfacing project. Water from the hardscaped play area was resurfaced and leveled so that runoff is directed into a bioswale where it permeates into the soil at the base of the play area.
- 100% of the school's landscaping has irrigation with the exception of potted plants. In 2013, an automated irrigation system was installed along with a local weather station enabling an internet-based control center. The facilities team monitors water usage and water station data in the office and makes adjustments to watering cycles according to precipitation and seasons. All areas of landscaping have sprinkler heads according to the type of plant/area and the amount water dispersion needed. Planters have been

changed from rotor heads to bubbler or drip lines according to what maximizes water placement to the plants without runoff.

- Approximately 97% of the turf left around the premises are physical education areas and playground areas. Turf areas like the front of the school, which served aesthetic purposes, have been replaced with mulch or bark. Installation of mulch and bark takes place throughout the year, controlling weeds and maximizing moisture retention.
- Fescue grasses are around the perimeter of a large campus. Recent projects have incorporated 100% regionally appropriate plants in gardens, play areas, and landscaping. Plants include: Cercis canadensis, Ceanothus, Grewia occidentalis, Verbena lilacina shrubs, Herbaceous erigeron glaucus, Leymus condensatus, Lessingia filaginifolia, and Quercus agrifolia. Native oaks and Pittosporum surround the library and more oaks cover the Southern property; a foundation for a future oak woodland.
- MUS Facilities Maintenance and Operations Manager Jesse Landeros has collected rainwater from flex-a-spouts, rain drains, and gutters to use for landscape watering in particular areas of campus. The school relies on an Automated Irrigation Controller System (CyberRain) to collect data on moisture in the air, resulting in reduced water used for irrigation of landscaping.
- Stormwater runoff reduction is a priority. In 2015, a 1,500-square-foot Bioswale Detention Zone was created adjacent to a basketball court resurfacing project. As part of the bioswale, a new play space was created while replacing a parking area with Stabilized Decomposed Granite and native plantings.
- Over 50% of the ten-acre school property is permeable. An upcoming project approved by California's Division of the State Architect in June 2016 includes replacement of the main asphalt parking with Pacific Interlock Pavingstone Hydro-Flo series permeable pavers.
- The Fall 2015 Playground Project created native plant habitats in a new bioswale area where a Hummingbird Garden and Rain Garden will be built.

#### Element IC: Waste

- 66.66% of solid waste is diverted from landfilling or incinerating due to reduction, recycling, and/or composting. The monthly waste generated per person is 0.0237 cubic yards. Event waste is sorted for 98% diversion.
- MUS participates in the Santa Barbara commercial foodscraps composting program through Marborg. MUS segregates foodscraps and food-soiled paper from the waste stream using yellow bins. Solid waste diversion practices are taught beginning in kindergarten as well as during regular school-wide assemblies. The students are educated about how diverting foodscraps from the trash reduces their impacts on global warming. The foodscraps diversion program is part of the MUS culture and is utilized not only in day-to-day activities, but also for any special events. MUS strives for ZeroWaste events and completed a waste audit in 2010 to help characterize the waste stream and understand diversion opportunities. Wood trimmings are chipped on-site for ground cover and green waste is composted through Marborg along with the foodscraps. The compost and green waste diversion programs helped increase the MUS solid waste diversion rate from 21% in 2010 to 65% in 2016.
- MUS takes pride in the strides it has made toward lowering waste generation and increasing diversion rates. The County of Santa Barbara worked with the District in 2010–11 to improve diversion by reviewing service contracts and monthly bills,

organizing a lunchtime waste audit, and providing insight into waste generation and a deep understanding of needs.

- From 2012 to 2016, MUS decreased hazardous waste generation to near-zero, 0.016 lbs/person/yr, or about nine pounds annually for the entire school. Very few hazardous materials or toxics are present on campus. Reduction started with deliberate efforts to curtail materials and quantities purchased. Few chemicals are ordered. Containers are used until empty. New paint is water-based. Emptied cans and solvents are sent to the County's Community Hazardous Waste Center at UC Santa Barbara. Chemicals used in the elementary science laboratory are not hazardous and everything is stored to ensure safety and security.
- 100% of copy paper is Certified Sourcing from the Sustainable Forestry Initiative. All colored paper is 30% Post Consumer Waste.
- At MUS, "...prioritizing products with the least environmental impact" is found in Initiative #1 of the Sustainability PLAN, which aligns with both Pillars I and II. Facilities management members attend Green Purchasing Fairs to study products and services available. Maintenance purchases approximately 95% Green Seal certified products. Current green purchasing is evidenced by the elimination of products containing bleach and ammonia, and the use of a rechargeable outdoor sweeper.

#### Element ID: Alternative Transportation

- The community of Montecito east of Santa Barbara is semi-rural. Narrow roads, few sidewalks, and large residential lots define the neighborhoods. Walking and biking to school isn't easy. Still, about 19% of students either walk, ride their bike, scooter or skateboard to school. Encouraging the behavior, coupled with a District-supported safe pathway to school, has increased active transportation. MUS uses designated Safe Pedestrian Routes to School and has a "walking bus" program in which adults accompany groups of students as they walk to school along a given route.
- An online school family directory supports carpooling efforts. Approximately 5% of students carpool to school. Mode share data is collected during monthly Walk 'n Roll events and annually at the start of each school year.
- The school's Walk 'n Roll program was born out of a collaboration with Safe Routes to School local director, the MUS Superintendent, the Green Team, and the MUS Transportation Safety Task Force. Reducing environmental impact from cars is the foundation of the program. The monthly PTA Newsletter and the Principal's weekly notes consistently encourage walking, biking, and carpooling to school. Throughout the year, students are credited for walking or biking. PTA offers fun incentives for student participation. Logos and bag tags were developed specifically for program.
- A Federal Safe Routes to School grant funded the San Ysidro Road Path to school and a myriad of environmental impacts were reduced. The path was inaugurated in January 2012 when Santa Barbara County Supervisor Carbajal saluted the community's collaborative process and honored MUS, the Coalition for Sustainable Transportation (COAST), Montecito Trails, and the Montecito Association at the ribbon cutting.
- The Walk 'n Roll program is going seven years strong and is complemented by bicycle safety programs offered by COAST and the presence of 4-5 crossing guards at nearby crosswalks to increase safety for students. The Bike Monkeys, a local middle school bike-centric group, has visited the school a number of times to host bicycle skills clinics. A secure bicycle area and skateboard storage racks are available to encourage bicycling or skating to school.

 MUS has a well-publicized no-idling policy that applies to all vehicles and vehicle loading/unloading areas that are at least 25 feet from building intakes, doors, and windows.

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

#### Element IIA: Environmental Health

- MUS has a written Integrated Pest Management (IPM) Plan. Since August 2013, there
  has been an active effort to eliminate pesticides from campus. The MUS IPM goals
  begin with preventing pests from inhabiting campus in the first place. When pests are
  located, traditional pesticides are not used. Natural oils, such as peppermint, lemon and
  eucalyptus are used as an alternative solution. This approach has been effective and
  successful. Regular monitoring is an important part of the IPM. Pest identification and
  monthly inspections are an integral part of the program's success.
- Smoking on campus is prohibited and signs notify the public of the rule. Well-maintained water heaters are fuel burning. Annual HVAC checks include CO testing on appliances to ensure proper function.
- MUS adheres to the Asbestos Act with a Facilities Master Plan that includes a standard to remove asbestos as needed during summer-only, with a sealed and certified system. Asbestos areas in older structures are sealed or encapsulated.
- The MUS Cleaning Standards Booklet defines daily practices and includes the chemical management and purchasing policy. Exposure to hazardous contaminants is minimized by avoiding harsh chemicals and prioritizing low-VOC products as a first choice. Waterbased paint is standard. Third-party-certified green cleaning products like Suprox are a staple. Bleach and ammonia have been removed from custodial cleaners. All elemental mercury bulbs are scheduled for replacement by Summer 2017.
- Classrooms are Greenguard carpeted and walls are covered in burlap, absorbing sound. Mechanical devices and HVAC do not create echoes or reverberation. Classrooms have good acoustics and are quiet learning spaces (<45 dBA); speech is clearly heard.
- Daylighting and quality electrical light are cornerstones of the physical plant. Most classrooms have large windows and outdoor patios. Rooms that don't have patios have views of mountains, trees, and even the ocean. With an exception of a few rooms that don't have views, daylighting is the norm. For rooms that do not have great daylighting, there is always high quality electrical light available.
- Humidity is not a problem on California's Central Coast. Despite the school's age, 70% of the classrooms have HVAC systems, and are checked annually. Of the rooms that don't have HVAC, non-mechanical means of natural ventilation are available, with well-maintained operable windows. Ample space and small class size promote good Indoor Air Quality.
- The District employs a heating and air conditioning company that inspects and maintains the school's ventilation and HVAC equipment annually. The company inspects and repairs automatic thermostats to make sure that they are set properly for student and staff comfort, and to maintain energy efficiency. The filters for the HVAC systems are changed four times per year by MUS Custodial Staff.
- Many steps are taken to avoid environmental asthma triggers and prevention is a priority. Success begins with a program that implements only HEPA vacuum cleaners. These vacuums' filtration systems have four levels, starting with a micro-cloth filter. Intercept micro filters are used inside the cloth filter to expand the filtration system.

Filters are changed frequently in order to eliminate the possibility of airflow restriction and reduced suction, and to enhance dust removal. Checking filters regularly is part of the custodial protocol. During the school year, all classrooms and public spaces are vacuumed daily. Common triggers, such as dead insect body parts, secretions, droppings, and dust mites, have not been an issue due to careful attention paid to potential infestations. Asthma-Safe cleaning supplies are used. Emergency food supplies and other potential pest bait, stored in metal cans, are not kept indefinitely. No smoking is allowed on campus and domesticated animals are prohibited.

- MUS employs a skilled custodial staff that proactively work to address condensation concerns. Original structures are well-built, well-maintained, and above-ground; there are no portable classrooms on campus. Areas where moisture is commonly found (restrooms, classroom sinks, and kitchens) are cleaned daily. Inspections of pipes, attic space, and restrooms are performed regularly and annually, in accordance with the Facilities Master Plan. There is no history of moisture issues on the campus.
- Since 2010, there has been a conscious effort to ensure that MUS is a lead-safe campus for students and staff. Superintendent Murphy and staff have emphasized "green" and thoughtful approaches to such issues, especially with Facilities Master Plan projects, health and safety, and maintenance. Efforts include paint removal, using only waterbased paint, and conducting annual water testing to ensure drinking water is free from lead contamination.
- MUS receives drinking water from a municipal water source and samples from the water district are analyzed weekly. Weekly testing for bacterial contamination is also done. Testing is ultrasensitive, measuring to one-half part per billion. Protection from contaminants starts with a high-quality supply, treatment of water with filtration, and trace amounts of chlorine added to disinfect water as it travel through pipes. Water is tested regularly in state and water district labs.
- Old pipes are steadily being replaced in the water system at MUS. 75% of classrooms were built after 1990, when new codes went into effect. The drinking water is tested for lead annually. Students and staff refill their reusable bottles with filtered water at a Rethink the Drink hydration station. As of this writing, MUS has diverted more than 80,000 single-use plastic water bottles from the waste stream.
- The Facilities Maintenance & Operations Manager has conscientiously removed traditional chemicals from routine cleaning since his appointment in August 2013. The custodial staff uses Green Seal cleaning supplies. Traditional chemicals, such as bleach and ammonia, are no longer part of the custodial resources. All cleaning is done with Suprox products, a certified green cleaning fluid that is a concentrated multipurpose cleaner. Student and staff exposure to chemicals has decreased greatly. In addition, there is a concerted effort to only use these products after school learning hours, and when the students are away for at least 14 hours. Limiting the student and staff exposure to chemicals, who are using the chemicals most frequently, are encouraged to wear gloves and masks to protect themselves from exposure.
- MUS facilities and maintenance staff is committed to a healthy and green school and has built professional learning at the Green California Schools Summit. The California Department of Public Health's Guide to Healthy Cleaning & Asthma-Safer Schools and videos have provided inspiration and direction while meshing with the MUS Custodial Cleaning Notebook. These sources of information confirm that MUS is on track with best practices. MUS is happy to be going green for savings, but mostly for the health and wellness of the school community.

- The EPA Indoor Air Quality (IAQ) Tools for Schools have provided a meaningful template to achieve high IAQ standards at MUS. The Facilities Maintenance and Operations Manager is the school's IAQ Coordinator; his team consists of the custodial staff. The team actively incorporates elements found within the IAQ Tools for Schools into everyday campus systems. Annual inspection of ventilation systems by a third party is a starting point. The IAQ Plan aims to keep the air free of VOCs, fumes from hazardous cleaners, pests, and lead. Creating an IPM Plan, compiling a Cleaning Standards Booklet, and focusing on microbial management have been successful solutions. All these practices keep the IAQ at a high level. Trees are found all over campus and near the classrooms. Finally, the Safety Committee, which meets quarterly, is made up of administrators, teachers, and parents working to ensure environmental and/or health quality for the MUS community. This committee is effective in making recommendations and taking corrective action.
- MUS is blessed with an excellent semi-rural location and very clean air. Even so, the school works hard to protect outdoor environmental quality. Signs are posted to remind visitors that smoking is not allowed. Signs are also posted in all four parking lots reminding drivers to curtail vehicle idling, and reminders are stated in the online PTA newsletter. Poisonous pesticides and herbicides are not used on campus.
- An inefficient school bus was eliminated and a major effort was made to support a Federal Safe Routes to School grant for a walking path to school. Today there are fewer cars pulling into parking lots and the air is fresher for students and the community.
- Over the years, many trees have been planted on campus. An upcoming Arbor Day celebration and a landscape improvement project approved by the California Division of the State Architect to take place in Summer 2017 will introduce more trees. A private Kindergarten play area, the Organic Garden, the playing fields, and the southern section on the property are all havens for fresh air.

#### Element IIB: Nutrition and Fitness

- "Nutritional integrity" and "local procurement practices" are the cornerstones of the menu served at MUS. The school partners with the neighboring Santa Barbara Unified School District's Mobile Café, with funding from the Orfalea Foundation, to feed students with foods that promote wellness. The Mobile Café serves lunch and morning snack daily. Whole foods with clean ingredients are offered. At MUS, over 90% of the fruits and vegetables are organic and come from Harvest Santa Barbara, a cooperative of local farms. The Farm to School program features Harvest of the Month selections. The District funds Mobile Café purchases of organic food, in most cases; otherwise environmentally preferable food is purchased. Whole grain breads, rolls, and granola are baked daily. All students receive nutrition and digestion instruction through STAR Education programs.
- A School Wellness Plan was approved by the Board of Trustees a decade ago, and linked nutrition to students' ability to achieve in class. Among other elements, candy and sweets are not allowed for class parties or student rewards.
- An Organic Garden was created to promote nutrition education. The Organic Garden has been maintained by parent volunteers, staff, and visiting professional farmers. Horticultural instruction is provided in the garden, and interested students take part in the maintenance of the garden weekly, accompanied by the volunteers. The garden is accessible as a teaching space for all teachers. Planting vegetable and flower seeds, seeing plants grow, growing milkweed for monarchs, and watering all the plants with homemade "compost tea" have been part of creating a productive and beautiful garden.

There are many beds of vegetables and flowers there now. Harvesting the bounty and tasting the fresh produce has always been a wonderful reward for those who participate.

- Every MUS elementary student participates in two physical education classes for a total of 60-75 minutes each week. There is a tradition of excellent fitness at MUS. BMI testing, fitness testing, and sports skills assessments are part of PE teachers' programs. Over 60% of the students in the 4<sup>th</sup> through 6<sup>th</sup> grades reach the equivalent top level of National Fitness Standards, while another 22% are at the second tier. BMI figures are excellent. Two credentialed physical education teachers teach classes to K-6. There are also 300 minutes each week for recess. During lunchtime, professional sports instructors offer games and activities including tennis, volleyball, and track and field. Students are free to play in several areas of the ten-acre campus. A separate playground is available for kindergarteners. 100% of PE takes place outside, unless it is raining. Recess activities are outside on grass fields, a newly refurbished sport court play area, and other hardtop areas.
- The MUS afterschool program has a health and wellness path, which includes classes and skilled playground games focused on health and physical activity, from learning to cook nutritious foods to playing soccer.
- MUS is a registered participant in the SunWise program and anticipates 50% participation by 2017.
- An on-campus Davis Vantage Pro2 weather station tracks the UV index, which is posted daily on the school website. If the UV index reads 2 or above, custodial staff set up additional canopies for lunchtime activities to protect students from the sun's rays.
- Student activities and exercise are outdoor-oriented at MUS. The campus features many
  outdoor playing spaces, and mild weather allows students to play outside nearly 100% of
  the time. Three distinct areas feature climbing bars and park-like structures. Unique
  among elementary schools, MUS has a rubberized ½-mile track in addition to a softball
  diamond, a large soccer pitch, newly refurbished basketball and volleyball courts,
  tetherball courts, handball walls, 4-Square courts, and painted playground games.
- Each student enjoys five hours of recess per week to engage in self-directed play. PTA sponsors the yearly Jog-a-thon for all classes. The Coalition for Sustainable Transportation (COAST) puts on a bike safety workshop. Students participate in several track meets each spring. Afterschool sports teams compete with kids at other nearby schools; the afterschool enrichment program offers dance, yoga, soccer, and volleyball. The Garden Club meets weekly at lunchtime.
- The MUS Administration considers teachers and staff a part of the family and invests in the wellness of the extended MUS family.
  - A lactation suite is located in the staff lounge. This "pod" supports nursing mothers with privacy, comfort, and a sanitary environment.
  - Free annual flu shots are offered to staff and family members.
  - There's a program to support employee mental health with access to free psychological consultations.
  - Community partnerships are valued. The YMCA across the street from campus offers free memberships to MUS staff.
  - The Santa Barbara Unified School District's Nutrition Services offers local organic fruits and vegetables, as well as hormone-free meat and dairy products as part of our Mobile Café lunch menu, available to both employees and students.

- The administration gave all staff members insulated lunch bags, salad shakers, and pedometers to encourage healthy habits.
- Several social staff members gather for bike rides, hikes, and even adventure races. All staff run or walk in the annual Jog-a-thon.
- Health and wellness is a priority.
  - The school's full-time nurse offers annual training to staff covering asthma, seizure, diabetes, and severe allergic reaction management; proper usage of Epi-Pens and inhalers; medication administration; 504 plans and IHSPs; and Universal Precautions.
  - The Santa Barbara Unified School District's Nutrition Services makes homemade, organic, and local food available to students and staff via the Mobile Café, demonstrating a commitment to Sustainable, Organic, and Local (SOL) food.
  - An annual student trip to Fairview Gardens, a non-profit suburban farm, offers opportunities to see urban food production and connect with food sources. Students learn of "organic" and the value of SOL food. Another local success is a CSA business participation at school events.
  - MUS partners with a local "Eat, Drink, Garden" expert who runs the organic garden club. Kids are encouraged to eat fruits and vegetables for snacks. The YMCA across the street is a key connection for a healthy MUS.
- At MUS, the Whole School, Whole Community, Whole Child model is a priority, offering a healthy and safe school environment and a solid infrastructure for a Coordinated School Health approach. Health issues, including immunizations, are part of a district-level improvement plan; students' hearing and vision are screened; and computerized health records comply with privacy mandates and allow for tracking.
- MUS has an important relationship with the Montecito Emergency Response & Recovery Action Group (MERRAG), a network of trained volunteers. MUS is fortunate to partner with MERRAG and Montecito Fire District at school events like the Carnival, the Pancake Breakfast, and holiday performances. Community health and wellness is a goal and the presence of these local groups is integral to the well-being of students and visitors. A partnership with Nutrition Answered will bring nutritionists to campus to teach students about how food affects their bodies. In addition, CPR and first aid training are taught to teachers and staff by Action Preparedness Trainers on in-service. Even with a full-time nurse, the MUS staff is trained to care for students in times of need. CHP has provided extra services on local streets near the school for extra support to crossing guards and parking lot staff during morning drop-off.
- A credentialed school nurse is present full-time in the campus wellness center. The Nurse provides mandated hearing and vision screening; assessment/treatment for ill/injured students; diabetic care; Individualized School Health/504 Plans for students with health needs; staff training; maintains confidential health records for all students; administers and ensures medication compliance; oversees AED/Epinephrine programs; and conducts comprehensive assessments to identify actual/potential health problems that may negatively impact learning. MUS strives for a healthy community, including the promotion of "Strive for 95," by maintaining current immunization records and timelines to ensure compliance with state mandates. A certificated nurse, employed by the Santa Barbara County Office of Education, is also on campus an additional 8 hours per week conducting assessments; providing screenings; attending individualized educational meetings; and providing support to special needs students.

• MUS believes in developing character dispositions that will allow students to experience lifelong success in an ever-changing world. Using Habits of Mind as a framework, all staff provide opportunities for students to develop mindsets that foster grit, empathy, responsible risk taking, clear communication, and a collaborative approach to solving complex problems. We see conflict and mistakes as essential elements of the learning process. We don't expect perfection in our students, rather we expect growth and accountability. Through the Restorative Justice Approach, dialogue circles are a primary vehicle used in all classes to allow students to convey feelings, needs, and process conflict. Throughout the year, students participate in events to support character development, conflict management, and anti-bullying. For example, each year, all students participate in Empowering Mustangs Month that includes focused dialogue circles, guest speakers, and school-wide activities.

#### Pillar III: Provide Effective Environmental and Sustainability Education

#### Element IIIA: Interdisciplinary Learning

- MUS defines environmental literacy as:
  - Awareness and sensitivity to the environment and challenges therein;
  - Knowledge and understanding of the interdependence of the environment and human impact on those systems;
  - Attitudes of concern and a disposition for caring about the environment and its degradation;
  - Motivation to identify and resolve these challenges; and
  - Participation in activities/action that will be of service locally and globally.
- The Green Team created the MUS Sustainability PLAN, which was approved by the school board in 2011. The mission is "to provide a framework that inspires and educates the children and families of MUS to make a positive lasting impact on public health and the environment while encouraging a lifelong commitment to environmental stewardship."
- Initiative #5 of the PLAN is to embed California's Environmental Principles & Concepts into the curriculum in order to "support MUS students in developing the knowledge, skills, and dispositions to become responsible stewards of the Earth…" For example, highlighting Principle 1 in 3<sup>rd</sup> grade, students no longer just study animal adaptations, but instead are posed the question, "How do we, as scientists and engineers, support our local wildlife through the drought?" Students then generate the questions they have about local wildlife, habitats, survival, human impacts, and the effects of the drought. Those questions are answered through research, labs, and a partnership with the Santa Barbara Wildlife Care Network.
- A schoolyard master plan aims to foster natural play by designing and building biomorphic forms and landscape, incorporating use of native plants, and reducing water needs by using drought tolerant plants. Natural materials are used with an intent to reduce plastics and harmful materials.
- MUS continues to develop integrated programs that address environmental literacy concepts in conjunction with the California Next Generation Science Standards (CA NGSS). The Science Specialist and classroom teachers partner to develop units that apply concepts to real-life situations. For example, 4<sup>th</sup> grade students researched and conducted experiments to help them answer the question, "What happens if we run out

of fossil fuels?" Through the study of energy transformation, students began to build awareness and appreciation for alternative energy sources. Sixth grade builds upon this by engineering energy-efficient homes and testing thermal energy loss.

- Campus wide, students investigate, "Where does our trash go?" and learn the difference between recycling, composting/food scrap, and landfill waste.
- MUS maintains a campus garden that is utilized across grade levels for applied learning. For example, 2<sup>nd</sup> graders engage in a study of insects and grow milkweed in the garden. Third graders engineer hummingbird feeders to hang in the garden to support local wildlife through the drought. All students have access to the garden during lunch.
- Assessments take a variety of forms including persuasive essays supporting a claim; using the Seesaw iPad app to record evidence of student understanding; and engineering a Rube Goldberg Machine to demonstrate energy transformation.
- The focus of professional development for 2016-17 is integration. As MUS continues to build cohesive units to include the California Common Core State Standards (CA CCSS), CA NGSS, STEM, and environmental literacy, educators ask, "How does this all connect?" In addition to carefully designed PD opportunities, teachers have weekly meetings to plan these integrated units. All teachers work with three STEM specialists to incorporate new elements. STEM specialists have attended/presented at numerous conferences across the state. The Facilities Operations Manager attends the Green California Schools Summit and leads weekly meetings with maintenance staff to provide best practices and suggestions to create healthy learning environments.
- MUS has a Science & Engineering Club where students (30 this year) meet weekly to engage in activities to build environmental awareness. For example, during computer science week, students "reverse engineered" e-waste to see how each part might be reused.
- A Garden Club has met weekly for over ten years. Students weed, plant seeds, cut flowers, and harvest vegetables. Special programs, such as "Cool the Earth," help to build student and parent environmental awareness.
- Field trips are regularly utilized to connect classroom learning to the outside world. Kindergarteners visit the Sea Center and take walking field trips to explore local habitats. First graders visit the County Fair to deepen understanding of livestock and food production. Second graders visit a local farm to observe life cycles. Third and fourth graders visit botanic gardens, including LotusLand, a unique garden/estate, to explore native plants and habitats. Fourth graders also participate in Pioneer Days, engaging in early settler activities connecting mining to erosion and effects on land. Fifth graders attend a week-long field trip to Virginia and Washington, D.C. to experience colonial life, which includes living outdoors. Sixth graders engage in a Primitive Living Skills Day.
- Students also attend WOLF Camp/Earth School outdoor camp for a week. Service Learning Pathways, a weekly meeting held to encourage acts of service, engages 15-50 students to participate in activities such as a tree hunt for Arbor Day, knitting hats for the homeless with recycled yarn, and picking up trash.

#### Element IIIB: STEM Content, Knowledge, and Skills

 MUS integrates sustainability, STEM content, and thinking skills into classes. The K–6 Life Science curriculum incorporates big ideas such as evolution of plants and animals, growth and change in living things, factors that affect living things, biomes, food webs, adaptations, structure and function, patterns, how Earth is changing, diverse systems, energy production/consumption, and human impact on the environment.

- The daily recycling program helps students realize the role they play in the sustainability challenge. Students in all classes learn about simple things they can do to help the Earth. Children learn that by reducing human impact on the planet now, they can provide for a more sustainable future.
- Third graders design, build, and use solar ovens to cook apples.
- The MUS Math Specialist introduces special math challenges related to environmental
  protection in his CA CCSS lessons. Trained student tech tutors in the Techies Club
  show their classmates and teachers how to use Google Docs and Google Classroom to
  submit and correct written assignments, so as to save printer paper and ink. The tech
  teacher also leads the 6<sup>th</sup> grade in its annual Opinion Poll Project, where students can
  do in-depth research into major environmental issues, and ask 50+ people in the
  community their opinions on these matters. Charts and graphs are generated to illustrate
  the data as part of a presentation board.
- With the faculty's background in Visible Thinking, gleaned from staff-wide attendance at Harvard's Project Zero Summer Sessions, technology is often used to discover, examine, and discuss clearer depictions of items in the content areas—from the solar system to colonial history to sound waves, Visible Thinking is emphasized.
- Students in all grades make connections to the larger context of the health of the planet and environmental issues. MUS was fortunate to have an assembly with Jane Goodall, introducing the Roots & Shoots program.
- CA NGSS implementation has allowed MUS to renew its focus on incorporating green technologies and "green" career pathways. MUS has a six-year partnership with UC Santa Barbara's "Sci-Trek Program," a group of graduate students who support students in doing science as real scientists do. For example, 3<sup>rd</sup> graders investigate the question, "What affects the direction a mealworm travels?" linking animal adaptations to environmental changes.
- MUS is in the process of developing a partnership with a local environmental consulting company, Dudek, to bring in scientists that are actively working in the field to show students how what they're learning applies to what's happening outside the classroom. This will build a foundation for MUS students to think about "green" career pathways.
- School assemblies have included guest speakers, such as marine biologist Dr. Sylvia Earle and primatologist Jane Goodall, both of whom exposed students and families to environmental career opportunities, encouraging them to discover and support innovative green strategies that benefit our planet.
- At the annual MUS Earth Day event, local environmental businesses participate, including Sol Force, which sets up a solar energy activity; the Clipper Windpower engineering team, which offers a wind energy activity; FUEL Biodiesel, which visits with an expert; and Eco-bus, which offers ideas on alternative energy. Reps from Explore Ecology, Watershed Resource Center, and Community Environmental Council provide informative activities. Scientists from the Santa Barbara Natural History Museum brought "beneficial insects" to release in school gardens; Eyes in the Sky, a wildlife program offered live predatory birds; and STAR Science brought animals from the rainforest. These scientists have been wonderful role models for students. Many 6<sup>th</sup> graders choose environmental topics for "Opinion Poll Projects," which are put on display for all MUS students to see and discuss with their teachers, providing child-led insights into environmental challenges and future careers.

#### Element IIIC: Civic Knowledge and Skills

- MUS students and families are extremely engaged in their community. Students and families of all grade levels are encouraged to participate in the Montecito Association's "Beautification Day." Participants are assigned to local neighborhoods to help pick up trash. Students and parents help run a "hydration station" at the event. Water is dispensed in compostable cups to eliminate single-use plastic water bottles.
- Another event all grade levels can participate in is California's Coastal Cleanup Day. Students and families clean up local beaches by picking up trash on shores and in creek beds.
- MUS students actively participate in donation drives throughout the year that support the concept of reuse, which include: used shoes to donate to the Soles for Souls program; collaboration with Santa Barbara High School athletes to collect gently-used sporting goods for local low income families; donating used eyeglasses for the Lions Club's "Lions for Sight"; and an America Recycles Day collaboration with Community Environmental Council in collecting/redistributing reusable bags for low-income families. Every month, civic-minded families donate cans of food to the Food Bank of Santa Barbara.
- In addition, each year, the 6<sup>th</sup> grade Leadership Team chooses different non-profit
  organizations to support. They hold a "Family Fundraising Fair," and invite fellow MUS
  students to buy tickets to play games that are created especially for the event. They also
  hold a bake sale to raise and donate monies for these non-profit groups. Several
  organizations have been selected, including the ASPCA & BUNS (Bunnies Urgently
  Needing Shelter).
- Third graders are working with the Santa Barbara Wildlife Care Network to generate ideas on how to support local wildlife during the drought. As a result, students engineered hummingbird feeders to hang around campus and their homes.
- Daily lunchtime activities include using recycled materials to create blankets for the homeless and dog toys for animal shelters. Students have also helped St. Jude's Children's Hospital raise over \$9,000 via the St. Jude's Math-a-thon.
- All students celebrate Earth Day annually with a daytime festival and a Family Movie Night. The daytime outdoor Earth Day event has included: a solar energy activity, a wind energy activity, Biodiesel bus, and activities from Art from Scrap/Explore Ecology and the Community Environmental Council. The event highlights programs from the Santa Barbara Natural History Museum, which brings "beneficial insects", Eyes in the Sky wildlife specializes in displaying predatory birds, and STAR Science Consultants has set up a walk-through rainforest experience with live animals.
- The administration and the PTA were happy to learn of the adoption of ACR-128, designating May as Living Schoolyard Month, and began celebrating the annual event in 2016. Tuning in to natural surroundings happens at MUS every day. Festivities leading up to Living Schoolyard Month commence in March with the celebration of California Arbor Day. Examples of Living Schoolyard Month activities include building bird feeders during Art at Lunch using only items sources from Art From Scrap or Explore Ecology; participating in a rainbow-colored vegetable activity with the Garden Club; and Photosynthesis Tag at recess with the Science Specialist.
- Outdoor learning is a key component in all grade-level learning. All students engage with the on-campus organic garden, which enhances understanding of academic concepts. The garden also helps to expose students to seasonally-appropriate eating and encourages healthy food choices for themselves and their families. In sixth grade,

students attend a Ropes Course that seeks to develop teamwork, communication, and set a "growth mindset" in students for the year. Primitive Living Skills Day connects the study of early human living through basic outdoor survival and living experiences. In the spring, students attend Wilderness Outdoor Leadership Foundation camp, a week-long camp that emphasizes self-development, camaraderie, trust, esteem-building, and natural history education.

- Each grade level takes multiple off-campus trips each year, as described above. These regular outdoor/off-campus engagements help to develop students' broader understanding and appreciation of community, state, and nation. The cumulative effect is to establish the foundations of appreciating environmental quality and responsibility—two core building blocks of "green" thinking and living—which leads to enhanced civic skills and social action. Student attendance at both campus and community beautification and cleanup events demonstrates the ownership they are encouraged to take in valuing their environments.
- The school board President and Green Team members collaborated with Santa Barbara High School (SBHS) to start a SBHS Sustainability Committee to work on Pillar elements in 2014. SBHS created a green position on the SBPTA, "inspired" by the MUS PTA. The MUS PTA was one of the first California PTAs to add a "Vice President of Green."
- In 2015, MUS hosted a California Department of Education workshop on "How to Become a Green Ribbon School." In addition to several regional school reps, all Santa Barbara County political offices sent representatives, including staff from our congressional representatives, the California State Senate and Assembly, and the County Board of Supervisors. The local newspaper made the MUS California Green Ribbon Schools status a cover story, resulting in one nearby school taking a template of the Sustainability PLAN to help prepare for a future application. MUS is proud to provide a model for other local schools.
- In 2011, a superintendent-led Green Team wrote the MUS Sustainability PLAN. The PLAN initiatives clarify green goals and objectives for Facilities, Student Involvement, Waste Reduction, Parent Education, and Curriculum for making positive change while helping to achieve the objectives of the Three Pillars. The mission of the PLAN is "to provide a framework that inspires and educates the children and families of MUS to make a positive lasting impact on public health and the environment while encouraging a lifelong commitment to environmental stewardship."
  - Initiative #1 pertains to the Facilities Master Plan, campus maintenance, and purchasing guidelines (incorporating both Pillar I and II values). The goal is to create a facility-wide plan that incorporates green building development, while prioritizing sustainable operations, purchasing, and maintenance strategies that meet or exceed State and Federal environmental standards, and reduce environmental impact and cost.
  - Initiative #2 focuses on Student Advocates (a Pillar III focus). The goal is to provide students with informative and experiential activities. By following the PLAN, student environmental programs like Cool the Earth taught students skills that enabled them to be stewards of the environment.
  - Initiative #3 is Waste Diversion (incorporating both Pillar I and II values).
     Because of school-wide technology integration, teachers often distribute assignments through Google Classroom, greatly reducing paper consumption.
     Additionally, during STEM lessons, students will use iPads to make their thinking visible and record data.

- Initiative #4 is Parent Education (meeting Pillar II and III goals). Facilitating parent participation in greening efforts is a simple idea that reaps a wide range of benefits. Environmental awareness is prevalent at MUS.
- Initiative #5 is Curriculum (the focus of Pillar III), including an objective focusing "on STEM curriculum with an emphasis on sustainability to prepare students for complex environmental challenges..." In the transition to CA NGSS, the focus on STEM and environmental literacy has allowed the program to evolve in a way that is integrated, meaningful, and forward-thinking.