

2015-2016 District Nominee Presentation Form

CERTIFICATIONS

District's Certifications

The signatures of the district superintendent on the next page certify that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

- 1. The district has been evaluated and selected from among districts 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.
- 2. The district is providing 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.
- 3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district 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.
- 4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 5. 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 school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.
- 6. The district 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 2015-2016 District Sustainability Award

Name of Superintendent: Dr. Michael D. Matthews

District Name: Manhattan Beach Unified School District

Address: 325 S. Peck Avenue, Manhattan Beach, CA 90266

Telephone: 310-318-7345 Fax: 310-303-3822

Web site/URL: www.mbusd.org E-mail: mmatthews@mbusd.org

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

accurate.

Date: January 20, 2016

(Superintendent's Signature)

ED-GRS (2015-2016) Page 1 of 2



Nominating Authority's Certifications

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

- 1. The district 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 education.
- 2. The district 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

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

(Nominating Authority's Signature)

Date: January 28, 2016

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your district is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments, being sure to cover equally all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only districts 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 ed.gov 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.

ED-GRS (2015-2016) Page 2 of 2





Manhattan Beach Unified School District

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







Prepared by
California Department of Education
School Facilities and Transportation Services Division
http://www.cde.ca.gov/ls/fa/sf/greenribbonprog.asp
January 2016

PART II – SUMMARY OF ACHIEVEMENTS

Manhattan Beach Unified School District, Manhattan Beach, Calif. Grassroots sustainability efforts led to district-wide change

Students, parents, teachers, and partners in the community led and inspired the Manhattan Beach Unified School District (MBUSD) to live by President Obama's words, "Change will not come if we wait for some other person or some other time. We are the ones we've been waiting for. We are the change that we seek."

In 2011, it was MBUSD parents and students who led a site-based effort seeking and ultimately earning U.S. Department of Education Green Ribbon Schools recognition for Grand View Elementary in the inaugural cohort (2012). Over the past four years, the green schools movement has continued to build in Manhattan Beach, and now it is truly District-wide. MBUSD is a prime example of how a grass-roots effort can become the change that it seeks.

The story begins with two groups of parents simply trying to make their school greener. Grades of Green (www.gradesofgreen.org) and Growing Great (www.growinggreat.org) began as groups of MBUSD parent-volunteers working to reduce waste while helping students understand the role of gardens and natural food in our lives. They made a difference at one elementary school, expanded to serve all MBUSD schools, and then expanded further to districts around the nation. These local leaders have been the change MBUSD has been seeking. Students and parents have led efforts in waste reduction. Students, dressed up as recycling clowns, starred in films doing the dirty, disgusting, yet fun work of waste audits, and positioned themselves at campus recycling centers to help their fellow students know what to deposit in waste, recycling, or composting containers. MBUSD has cut the number of trash bins it needs in half since 2010. MBUSD's student leaders are of all ages, from primary grades to seniors in high school, and they are the ones the District has been waiting for.

One parent created a clever lunchbox that promotes trash-free lunches. Now every first grader in MBUSD receives a free trash-free lunchbox, sponsored by Waste Management. It is a clear message that zero-waste is part of the culture in Manhattan Beach. One committed parent and one committed company are the change that MBUSD has been waiting for.

Simple behavior change programs have yielded dramatic results in MBUSD. A single employee's efforts to thank teachers and staff who changed their habits ensured that lights were turned off at night, the swimming pool was properly covered, and electronics were unplugged while schools were not in session.

MBUSD actively demonstrates its District-wide commitment to green and shows no sign of slowing down. In 2014, the Board of Trustees initiated efforts to dramatically reduce the District's ecological footprint by implementing solar panels and changing all lights to energy efficient LED lights. In 2015, the District's Green Committee entered its second year, emerging as an idea-generating center featuring businesses, City officials, volunteer organizations, parent volunteers, and District and school leaders. District efforts include a first-in-the-nation accomplishment in turning food waste into energy.

MBUSD has documented a 44% reduction in greenhouse gas emissions and a 33% reduction in non-transportation energy use. Each of seven schools is ENERGY STAR certified or meets the eligibility requirements for certification.

The goal of the District's environmental education program is 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. Since 2004, MBUSD has incorporated California's Environmental Principles and Concepts into K-12 history-social science and science curriculum with the goal of strengthening the environmental literacy of its students and providing them with the skills to understand, analyze, and critically evaluate environmental issues.

Students have meaningful outdoor learning experiences at every grade level. In addition, every elementary school has a MakerSpace on-campus, and Project Lead the Way is implemented for all elementary grades. MBUSD students learn to be problem-solvers and environmental advocates. In January 2009, 40 MBUSD students (grades 3-8) initiated a successful City-wide ban of single-use plastic bags and Styrofoam.

MBUSD administrators have adopted a "say yes" approach to leadership. They seek to "say yes" when parent leaders want to start a new program, when one individual sets out to change the habits of all employees, when students want to lead, and when community leaders have an idea that will promote healthy living and the environment. MBUSD has "said yes" to their committed citizens over and over, and the result is a green district that shines as a beacon for the community.

PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE

Pillar I: Reduce Environmental Impact and Costs

Element IA: Energy

- MBUSD's master plan to manage and reduce energy use is guided by the MBUSD Green School Operations plan, approved in 2006 and amended December 2015.
 MBUSD has partnered with Cenergistic since 2010 to manage resources wisely. This has resulted in an additional \$190,000 in energy cost savings every year. This year MBUSD contracted with Opterra Energy Services to install solar power and replace all light fixtures with new LED fixtures. The high school pool is being updated with solar thermal hot water heating and a variable frequency drive.
- The District has documented a 44% reduction in greenhouse gas (GHG) emissions utilizing Cenergistic ECAP systems. The initial GHG emissions rate (MTeCO2/person) was at 833, and the most recent GHG emissions rate (MTeCO2/person) shows that this rate has been reduced to 465. Data has been collected and entered since 2009.
- Resource use is tracked in the EPA ENERGY STAR Portfolio Manager, and 100% of Manhattan Beach USD schools received ENERGY STAR certification in 2016. Six out of seven schools scored 100; Mira Costa High School scored 83.
- MBUSD has reduced its total non-transportation energy use by 33% from 2009 to 2015 to 23,114,270.60 kBTU/student/year or 34.652 kBTU/square feet/year. The percent reduction was calculated utilizing Cenergistic ECAP Systems.
- Solar panels have been installed at the high school. They will provide 30% of the high school electrical needs. Additionally, the District has installed twelve solar motion-sensing outside lights, and additional lights will be installed as funds become available.

Work began on updating the high school pool with solar thermal hot water heating this past summer. Lunch tables on the Mustang Mall have been equipped with solar charging stations for student use.

- MBUSD will purchase renewable energy starting in 2016. Currently, the City of Manhattan Beach is coordinating efforts with other cities to form a purchasing entity, the Community Choice Aggregation (CCN), to buy green power on the energy market for its customers, including MBUSD. The City is working with Los Angeles County to conduct a feasibility study. The City anticipates the program will be up and running by early 2016 and that renewable energy will be available to the school district at that time.
- California Proposition 39 funds are being used to fund LED lighting upgrades at all sites, and additional funds are being used to install carport solar shade and rooftop solar structures, auditorium lighting and controls, solar thermal equipment for the pool, HVAC upgrades and an Energy Management System at the high school, and HVAC upgrades at the middle school. 100% of sites participate in Southern California Edison Base Interruptible Program, Summer Saver Discount Plan and HVAC Optimization Program. MBUSD participates in State of California Solar Initiative.
- All of the District's new construction/renovation projects incorporate green building standards and have LEED components. 100% of the District's outdoor lighting will be retrofitted with LED lights. 100% of new classrooms have natural daylighting and use state-of-the-art lighting that includes occupancy and light sensors. All HVAC systems incorporate economizers that use outside air to heat or cool buildings. The new buildings/renovations also use wall density and insulation along with reflective roofs to control heat load from outside. The 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. This past summer, the school board approved a Long Range Facilities Master Plan that incorporates remodeling/construction at all school sites. All new construction will incorporate best green practices. A voter-approved bond election to finance the project is proposed for November 2016.
- All 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, and
 these along with large trees, solar carport areas, and sun shade areas District-wide
 further reduce the heat island effect. In 2016, a parking lot at the high school will be
 replaced with turf fields.
- All schools have occupancy sensors for lighting. The new/renovated buildings also have daylight sensors that reduce light output. Proposition 39 funds are being use to retrofit all lights with LED lighting. An Energy Management System is being implemented. MBUSD recently installed solar carports and is installing rooftop solar structures which will provide for 30% of the electrical need at the high school. Solar thermal hot water heating and a variable frequency drive are being added at the high school pool. Shade structures with solar charging stations were added to provide seating on the Mustang Mall. All new buildings have state-of-the-art HVAC management systems that utilize outside air to condition the rooms. In the past year, Mira Costa has planted over 50 new trees and hundreds of low maintenance/low water use plants all watered by sub-surface irrigation systems with rain sensor technology. Approximately 20 additional trees have been planted at various locations throughout the District.

Element IB: Water and Grounds

- MBUSD uses 2,918 gallons of water/occupant/year.
- An EnergyCap program was used to process data collected from the City of Manhattan Beach utility bills, along with the assistance of Cenergistic engineers and MBUSD Energy Specialist. They were able to establish a baseline for domestic and irrigation water use from October 2012 to September 2013 as 26,631,792 gallons/7,866 occupants (3,386 gallons/occupant). The current domestic and irrigation water use over the past year (October 2014 to September 2015) is 22,949,388 gallons/7,866 occupants. There was a 14% reduction in both domestic and irrigation water use from October 2014 to September 2015.
- All campuses have native, water-wise and regionally appropriate plants/trees, and the
 District encourages using mulch as a water conservation strategy. Local vendors donate
 mulch to the schools and it is incorporated into all school gardens. MBUSD works with
 volunteer programs including Boy Scouts, PTA Pride Day Committees, and communityservice organizations to incorporate mulch in their landscaping plans.
- Water-efficient and/or regionally appropriate plants used at school sites include grasses (Feather, Festuca, Mond), succulents (Agaves, Aeomium, Echeveria, Euphorbia, Senecio), perennials (Agapanthus, Deites, Gazania, Lantana, Salvias), trees (Arbutus, Sycamore, Manzanita, Olive) and palms. All campuses have water-wise and regionally appropriate plants/trees as their primary landscape, and one site was recently xeriscaped. All school gardens are permaculture gardens. Fields have been converted to turf.
- 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.
- 40% of MBUSD's school sites are permeable.
- MBUSD uses two systems at the high school to capture storm water. One is called a bioswale, which 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 runoff.
- The District, in conjunction with the City of Manhattan Beach, has reduced watering on all campuses from three times per week to once per week. Recycled water is utilized and signs have been posted at each site to advise community members. The grass-cutting schedule was modified to permit cutting every other week instead of once a week. The District retained HydroPoint to evaluate a new sprinkler system at all sites, which will adjust watering levels based on humidity and include drip watering for all garden areas. This proposal is included in the District's 2015 Long-Range Facilities Master Plan, which is the basis for a bond which will go to voters in November 2016. Turf fields replaced grass fields at one elementary school and construction of additional turf fields at the high school will commence in 2016. All school sites are in the process of securing and installing rain barrels.
- 100% of outdoor space is devoted to ecologically beneficial uses. Each elementary school has a school garden serving as an outdoor classroom. PTAs and Earth Clubs at each school have restored native plant habitats to campuses. One campus is a Certified Wildlife Habitat. Boy Scout Eagle projects have added outdoor space to two schools. MBUSD is proud to host the Manhattan Beach Botanical Gardens, which serves as an

amazing natural resource for the entire community. "Ecoland" is a long-treasured garden/wildlife habitat between classroom wings at the high school.

Element IC: Waste

- 40% of solid waste is diverted from landfilling or incinerating due to reduction, recycling, and/or composting. The monthly waste generated per person is 0.11 cubic yards.
- 100% of food waste at six of seven sites is collected and sent to a processing plant to be
 converted into energy. Manhattan Beach is the first city in the nation, and MBUSD is the
 first District in the nation, with access to this technology. In addition, three of seven sites
 have on-site composting produced from schoolyard green waste and lunchtime waste.
 The soil generated is used in school gardens. Local vendors donate mulch to the
 schools and it is incorporated into all school gardens and is used for landscaping
 purposes.
- 100% of MBUSD's total office/classroom paper content is postconsumer material, fiber from forests certified as responsibly managed, and/or chlorine-free.
- 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
 utilized 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.
- Hazardous materials used in schools are disposed of properly. Paint is picked up by a
 third-party vendor and all new paint is water-based. Lead acid batteries go back to the
 battery supplier. Sites collect e-waste such as batteries, printer cartridges, and phones.
 The middle and high schools hold e-waste fundraising drives. Nominal lab chemicals go
 through proper hazardous waste disposal processes; toner/cartridges go back to the
 supplier for recycling. Lamps are recycled through an environmental recycling company
 and all lighting is being converted to LED.
- All five elementary schools have trash-free lunch programs, sorting liquids, recycleables, compost, and tray stacking, and also encourage packing trash-free lunches. The middle school started waste sorting in 2012; the high school began recycling campus wide in 2014. The District purchases ecologically-safe materials whenever possible and is in the process of replacing all lights with LED lights, thus reducing nearly all hazardous waste in the District.
- MBUSD's Operation Manual (Manhattan Beach USD/BP3510) states that the District will purchase and use environmentally preferable products and services whenever practical, including products that minimize environmental impacts, toxins, pollutants, odors and hazards, contain postconsumer recycled content, conserve energy and water, and produce a low amount of waste. Additionally, the manual states that the District will use the 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 purchased is evaluated for energy efficiency. MBUSD purchases only postconsumer material toilet paper and paper towels, which are 100% sustainable, and paper from rapidly renewable fibers. Mulch mowers have been purchased and are utilized at all sites. The District reviews Unisource's 'Green Gauge Analysis' on a regular basis to evaluate/improve our purchase of green certified cleaning products.
- The District's efforts to raise environmental awareness and sustainability have grown into a true collaboration between the schools, the City, and the community. Some of the additional efforts include: four elementary schools hold e-waste collections for batteries,

printer cartridges, electronic devices, and phones. E-waste drives are held at the middle and high schools. Waste audits are conducted regularly at all elementary schools and for the last year also at the middle and high school to determine how much waste can be diverted from landfills. Since implemented, the high school has reduced landfill waste by 37%.

- Each school has an electronic newsletter instead of paper, including a monthly Earth Tip. Online directories are utilized to save paper.
- Many elementary schools sponsor Halloween costume recycling programs and one elementary school has a costume rental closet managed by the PTA.

Element ID: Alternative Transportation

- At MBUSD 28% of students walk to and from school. 5% use their bicycle/scooter/skateboard. 17% of students carpool, 1% use the school bus, and 1% use other public transportation.
- MBUSD has seven schools with a well-publicized no-idling policy that applies to all
 vehicles including school buses, and vehicle loading/unloading areas are at least 25 feet
 from building intakes, doors, and windows. Secure bicycle areas and skateboard storage
 racks are available to encourage bicycling or skating to school. One school has
 designated carpool parking spots that equal 14% of the parking lot.
- 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. Twenty 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. Parent and school leaders also include reminders in the e-bulletins sent to all parents.
- 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.
- In 2015, all schools kicked off Walk to School campaigns by participating in International Walk to School Day. From 2009-2011, the District held a City-wide Walk to School Parade on Earth Day. Elementary schools sponsor contests at school, including weekly Walk to School Wednesdays, to encourage walking and carpooling (highest walk/carpool %). 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 at the middle school and high school, and is facilitated by the District, including offering an e-bulletin board on the high school website to allow carpoolers to connect. Carpool spaces are designated at the high school. The superintendent, principals and City Council members participate in the Walk to School Program to show support and to encourage others to use the program.
- Middle school Green Team members are leading "walking assemblies" and elementary schools are holding green assemblies.

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

Element IIA: Environmental Health

- EcoPesticides are applied by an outside contractor for the control of bug invasions. The District uses traps and bait stations for pests and keeps all vegetation away from buildings. The District has a tree-trimming program to keep tree branches away from buildings. The District uses 0.02721 gallons of diluted product (the dilution ratio is four oz/gal)/student/year. Over the last two years, weed control products were reduced from seven to three. Most gardens were converted to native plant gardens. The high school football field (2008) and one elementary field (2012) were converted to turf. Plans are in the approval process with DSA to convert a parking lot and additional fields at the high school to turf. The estimated start date for this project is sometime in 2016.
- MBUSD prohibits smoking on campus, has identified and properly removed sources of
 elemental mercury and prohibits its purchase and use in the school, uses fuel burning
 appliances, has taken steps to protect occupants from carbon monoxide (CO), and has
 identified that there are no wood playground or other structures that contain chromate
 copper arsenate. MBUSD adheres to the Asbestos Act and has an asbestos
 management plan in place.
- MBUSD 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.
- Signage prohibiting smoking is on all buildings and entrances. All campuses are designated tobacco-free zones.
- MBUSD's Policies AR and BP 3514.1 mandate the purchase and use of environmentally preferable products and least toxic, independently certified green cleaning products. The policies require proper storage and labeling of hazardous materials, inventory procedures, and directions for clean-up and disposal. The policies require staff training in handling hazardous materials. Light bulbs and 95% of paint are stored off-site in a locked shed. The other 5% is stored in locked fireproof cabinets. Lab chemicals are labelled and stored on-site in special cabinets.
- MBUSD classrooms have good acoustics (less than 45 dBA), good daylighting and high-quality electrical light when needed, and good relative humidity control (ASHRAE 30-60%). 100% of classrooms exceed minimum outdoor air exchange rates and have views of trees and nature.
- All schools are in quiet residential areas and are built with wall coverings, carpet, and ceiling tiles to enhance acoustics. Most rooms are equipped with voice enhancement systems. 100% of classrooms have good acoustics. 80% of classrooms have high-quality lighting and good daylighting. Many rooms have large windows and outdoor patios. 80% of classrooms have relative humidity of ASHRAE 30-60%. The District implemented daylight usage in all recently completed construction, including the placement of skylights, multiple windows, and smart lighting controls. In 2016, MBUSD will complete a retrofit of all lighting fixtures with LED fixtures with occupancy and daylight sensors. The middle school and most high school buildings have state-of-the-art HVAC management systems that utilize outside air to condition the rooms. All other classrooms have windows that are regularly opened.

- All new buildings utilize lab hood ventilation systems and exhaust systems to keep airborne contamination out of the classrooms. Students do not perform lab experiments that produce major contaminates at the K-5 level (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.
- 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 there is 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 vacuums with multi-stage filtration and HEPA filters, and tints windows instead of using dust-collecting blinds in some classrooms. Carpet has been removed from some rooms to accommodate students with asthma. The green cleaning materials that are used are assessed including a review of the raw materials for potential inhalation and respiratory irritation. Peanut-free tables are designated at each school to provide a safe environment from allergy-induced asthma.
- MBUSD follows all Environmental Protection Agency guidelines for leaks and mold remediation in schools. All roofs and buildings are inspected for leaks and mold annually and any report of mold is investigated immediately. If mold is found to be present, it is remediated by a licensed hygienist and retested. Since MBUSD is located in Southern California, humidity is relatively low. MBUSD performs regular maintenance on HVAC equipment. MBUSD makes use of vacuums with multi-stage filtration and HEPA filters, which prevent very fine particles such as mold spores from returning to the vacuumed area.
- Every three years, an AHERA (Asbestos, Hazardous Emergency Response Act) investigation is conducted. Every six months, there is a check-up of AHERA by an environmental contractor. All construction materials are tested by an outside environmental contractor and any (hot) material is abated by a certified contractor. Lead-based paint and plumbing is no longer used. Drinking fountains are monitored for lead content. Post-construction water sampling and chlorination ensures that all problems are addressed.
- The Public Works Department ensures that the City's water supply meets state and federal water quality requirements. The City's water plant operators sample water weekly through an independent lab. Protection from contaminants starts with high-quality supply and treatment of water with filtration. Trace amounts of chlorine are added to disinfect water as it travels through pipes. A stormwater program is in place; certification and annual testing of backflow devices meets Public Health Department standards.
- 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 (two 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.
- MBUSD uses sustainable, non-toxic, and environmentally friendly products, such as organic pest control chemicals, eco-safe pest reduction products, and green cleaning

supplies. Herbicides are applied only during holiday breaks, with no students present. District policy prohibits children from entering a treated area for at least 48 hours after the treatment. Paint is picked up by a third-party vendor and all new paint is water-based paint. Lead acid batteries go back to the battery supplier. Sites collect e-waste, including batteries and printer cartridges, and return these items to vendors. Nominal lab chemicals go through hazardous waste and toner/cartridges go back to the supplier for recycling. MBUSD provides professional development to maintenance staff in the proper use, storage, and disposal of cleaning supplies. All science staff and students are instructed in lab safety on a yearly basis. All new staff are trained on-site as to best practices.

- MBUSD uses the practices outlined in "Healthy Cleaning & Asthma-Safer Schools: A How-To-Guide." MBUSD uses Johnsons and Diversey green-seal-certified cleaners that use a system that ensures proper dilution ratio. All of our daily cleaning products are green-seal-certified. 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, and reduce the use of water and cleaning products. MBUSD is also piloting the use of microfiber rags as a test to see if it will be an effective option for the District. Vacuums incorporate HEPA filtration, and all carpet cleaning is done with high-temperature steam cleaning machines. The carpets are also low-VOC, with self-adhesive backing that doesn't require glue for installation.
- Unisource, the District's distributor for cleaning/custodial supplies, provides a 'Green Gauge Analysis' yearly, which indicates that 71% of all cleaning supplies, along with custodial paper products, are LEED-certified. MBUSD uses green-seal-certified and EcoLogo-certified cleaning products, chemicals, toilet paper, paper towels, and hand soap.
- 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.
- All schools post signs designating no-idle zones and advising that campuses are tobacco-free. Each school site schedules two Pride Days each year. Prior to Pride Day, school PTA representatives, along with a District consultant, survey the campus, and develop a garden plan to include native and drought-resistant plants, mulch, and other environmentally friendly practices. During the past year, Mira Costa has planted over 50 new trees and hundreds of low-maintenance/low-water-use plants all watered by subsurface irrigation systems with rain sensor technology. Approximately 20 additional trees have been planted at various locations.

Element IIB: Nutrition and Fitness

- MBUSD schools participate in a Farm to School program to use local, fresh food and provide staff, students, and families with information on nutrition education and programs.
- In 2015, the Alliance changed its requirements in regards to the mandatory breakfast requirement and MBUSD will be applying for certification later this school year. MBUSD has daily fresh garden bars at all seven school sites. This year, MBUSD invested in newly designed salad bars for elementary schools. 70% of the produce purchased is

- from local sources. The percentage of foods that are purchased by the District that are certified as environmentally preferable is approximately 10%. As products become more available, it is the District's goal to increase the percentage.
- MBUSD has a dedicated Food and Nutrition website and publishes an electronic
 monthly newsletter along with its menus to provide staff, students, and families
 information on nutrition. In 2016, all elementary schools will have digital display monitors
 that will convey nutrition education to the staff and students. Elementary schools, as part
 of the Growing Great garden program, provide a newsletter to parents to support each
 lesson.
- All five elementary schools have on-site food gardens producing seasonal fruits and vegetables such as lettuce, radish, carrots, and broccoli. After fall and spring plantings, all students harvest and create fresh salads from the garden. MBUSD is looking into the feasibility and safety of serving some of these student-grown vegetables in school cafeterias. Additionally, all five elementary schools have a Growing Great program called Harvest of The Month, where volunteers offer a sampling of a garden seasonal food or offer a seasonal fruit or vegetable supported by a local farmer's market (Manhattan Beach Farmer's Market). All elementary schools participate in the Growing Great garden program, where the children receive instruction tied to California standards. Each lesson is supplemented with additional reading materials, which are sent home with the children. The MBUSD Food and Nutrition website and monthly newsletters provide parents and students with additional information regarding nutrition.
- MBUSD has 100 minutes a week of physical education for K-5, and another 100 minutes per week of school supervised child-led, child-directed play time. Grades 6-12 spend 400 minutes per week in supervised physical education. Grades 6-8 have 100 minutes of student-directed outdoor free time. 100% of our students physical education takes place outdoors. MBUSD Wellness Policy promotes healthy activity and eating habits and outlines best practices.
- Physical education at the middle school is divided into eight-week sections that cover different sports, like swimming, basketball, yoga, and paddle tennis. Physical education at the high school is team-driven and additionally offers weight training and conditioning. At the high school, recently instituted office hours offer students 90 minutes of outdoor self-directed time each Wednesday. Run Clubs at each elementary school and PTA-sponsored fun runs supplement outdoor physical education. All elementary schools participate in the Growing Great Garden program and students actively harvest, weed, haul, plant, and turn soil. Every child in our elementary schools spends time in the school garden.
- The California Healthy Kids Survey is done annually in grades 5, 7, and 9. The survey assesses students' physical and mental health needs. Physical fitness tests are conducted yearly in middle school. Nationally mandated physical fitness tests are administered to all 10th graders. All middle school students have run day every Wednesday and they run timed mile runs each quarter with progressively decreasing time goals.
- MBUSD Health and Safety Committee meets four times a year. This committee reviews
 policies and practices related to health and safety and makes policy suggestions. The
 District's Medical Advisory Board meets three times per year to review policies and
 practices related to the medical needs of students and consults on health issues. The
 MBUSD Wellness Policy promotes healthy activity and eating habits and outlines best
 practices. School-sponsored activities and afterschool enrichment programs follow
 District wellness policies. After school programs are activity-based programs and provide

healthy snacks. MBUSD follows Board Policy 5141.7 on sun safety. All administrators work with staff to encourage sun safety and the use of sunscreen. Physical education teachers incorporate sunscreen information in their lessons. The City of Manhattan Beach, with support from the District, is evaluating providing free sunscreen to the public via easy to access dispensers throughout the City. Each site has shade structures in place.

- MBUSD is working with the Beach Cities Health District to offer healthy lifestyle options for our staff, by offering gym membership and various classes at low costs. MBUSD school leaders have organized a staff 'Step Challenge.' MBUSD offers all staff members access to an Employee Assistance Program (EASE), which is a program dedicated to mental health. Annual flu clinics are available to all staff free of charge. Staff members have access to fresh garden bars and freshly prepared meals daily at a minimum cost. The Growing Great curriculum supplements its lessons with lessons for teachers. Administrators read the book Head Space and are encouraged to explore mindfulness. They explored meditation techniques during summer meetings. All K-5 teachers were trained for 12 hours on mindfulness. This past summer staff altered their work schedule to wor four ten-hour days instead of five eight-hour days in order to provide staff with more days off and to conserve energy. MBUSD has increased professional development at all levels to support teachers.
- MBUSD creates freshly prepared meals daily using all five food groups. 100% of milk is locally sourced. 40% of produce is locally grown. The District has close relationships with local growers. Paper goods are compostable and recyclable. All sites practice recycling in the kitchens. The high school Kitchen Supervisor was awarded the Environmental Award for leading the reduction of waste in her kitchen. The Health and Safety Committee meets several times a year to discuss, implement, and improve student and staff safety and wellness. The School Wellness Policy is in the final update stage and has many new points that address student and staff wellness. The Medical Advisory Board, a unique committee of over 25 medical professionals, meets three times per year with school and District representatives to review current medical challenges.
- MBUSD has adopted a Health and Wellness Policy, which promotes healthy activity and eating habits and outlines best practices. The Health and Safety Committee and Medical Advisory Board meet regularly to review health-related 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), Blue Zones (Healthy Kids Survey), Growing Great (Harvest of the Month), and Grades of Green (Walk to School promotion) to supplement health-related initiatives. The District supports run clubs, extracurricular clubs/athletics, and other activities.
- MBUSD partners with Beach Cities Health District, an agency providing preventive health services to the community. We are also members of SNA-School Nutrition Association and CSNA-California School Nutrition Association, with whom we meet regularly to learn about the industry, new products and best practices. MBUSD partners with Growing Great and Grades of Green to enhance nutrition and environmental curriculum. All K-5 teachers are implementing the 'MindUp' curriculum, which helps children improve focus, reduce stress, handle conflicts, and develop empathy. The District partners with Safe Routes to School to develop the safest ways to bike/walk to school. Families Connected is a new program that has partnered with the high school to provide support to teens and parents facing issues with drugs and alcohol. Josh Ochs of Safe, Smart, Social.com is advising students regarding internet safety. MBUSD partners

- with WestEd on an annual basis to administer the California Healthy Kids Survey, which assesses drug and alcohol behavior.
- MBUSD has two full-time District nurses that are on-call for all sites. All sites have a health clerk on staff. The Counseling and Student Academic Support (SAS) Program at Mira Costa provides students with access to seven counselors. Counselors play an essential role for all students in academic guidance, personal counseling, and life planning. Additionally, there are two full-time college and career counselors and one assistant devoted to coaching high school students and helping them navigate the often overwhelming college application process. At the middle school, there are three academic guidance counselors available to students.
- The Safe School Ambassadors program, an anti-bullying program, has been used at six out of seven schools. MindUP, a mindfulness program, is used at all five elementary schools. Character Counts, or other character programs, are used at all seven schools and highlight different character traits each month. PACE (People Acquiring Complete Equality) and Families Connected are programs utilized at the high school to train students to facilitate assemblies and conduct panels, workshops and discussion groups in the areas of drug awareness, respect, and conflict mediation. The Ambassador Program and Lunch Bunch provide lunchtime and recess anti-bullying assistance. Friendship Circle assigns mentors to special needs students. Students also participate in service learning communities. Assemblies are organized by PTAs to educate parents and students regarding drugs, alcohol, and bullying. MCHS has also implemented a program called "H.E.A.R.T.," Helping Educate Acts of Respect Together, a kindness and anti-bullying campaign.

Pillar III: Provide Effective Environmental and Sustainability Education

Element IIIA: Interdisciplinary Learning

- 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."
- Since 2004, MBUSD has incorporated California environmental literacy standards and curriculum into its K-12 history-social science and science curriculum with the goal of strengthening the environmental literacy of its students and providing them with the skills to understand, analyze, and critically evaluate environmental issues. MBUSD has adopted Board Policy 3510(a), Green School Operations, which mandates instruction to students on the importance of the environment and involving students in the implementation and evaluation of green school activities and projects as appropriate. BP 3510 additionally promotes sustainability by encouraging reduction of energy and water consumption, establishing recycling programs, and purchasing and using environmentally preferable products and services.
- In 2015, MBUSD adopted a Long-Range Facilities Plan with assistance from DLR Group based on input from teachers, staff, parents and students. The Facilities Plan was developed based on sustainability. In the plan, the District states "that our schools must be models of sustainability and energy efficiency to be good stewards of global

- resources and taxpayer dollars, encouraging lifelong awareness and ecologically responsible practices for our learners. Design must consider conservation of resources and durability and maintainability of materials and systems." This vision underlies all proposals set forth in the Facilities Plan.
- MBUSD's science curriculum integrates environmental and sustainability concepts.
 Concepts include: MakerSpace programs (K-5), reduce and recycle (K), waste (1),
 endangered animals (2), lifecycles and pesticides (3), coastline erosion (4), and
 environmental science projects (5). This discovery continues in STEM and FabLab
 classes (6-8), dissections (7), AP Environmental and other science classes (9-12),
 where environmental concepts are explored. Science specialists offer hands-on lessons
 in environmental protection, animal life-cycles, and conservation. Environmental
 concepts are also explored in many electives.
- In Model United Nations, students debate topics such as illegal trade and rainforest preservation. Broadcast Journalism and Media Arts students produce documentaries on the environment. Journalism reports on e-cigarettes, trash reduction, and other issues. Students study soils, pesticides, and other issues in classes in Landscape and Civil Engineering/Architecture at SCROC. MBUSD has four STEM electives (6-8), three sections of Marine Science, and five sections of AP Environmental Science (9-12). More courses have been added due to high demand. MBUSD uses the Growing Great garden program. Students grow vegetables, harvest, sample, and serve produce to students and host farmer's markets.
- All grades are tested in social studies/history and science regarding state environmental standards. Cynergetics evaluates water and energy use monthly. Eco-audits at each site assess environmental achievement. Volunteers monitor waste daily. K-12 science teachers attend NGSS professional development in environmental science and sustainability. K-12 are trained in STEM for MakerSpaces, FabLab, Project Lead the Way, and other STEM options. The District's Energy Consultant instructs staff in conservation and sustainability. Principals and teachers collaborate on the District Green Committee. MBUSD teachers attend assemblies, science fairs and lessons taught by Grades of Green and Growing Great.
- All schools have clubs incorporating environmental issues including: Earth Clubs with representatives on Student Council and Garden Clubs (K-5), Green Team (6-8), Ecology Club, Blue Zones Club, Living Green Club, and Grades of Green Club (9-12). All sites provide hands-on field trips to reinforce environmental education. Elementaries visit the local Roundhouse Aquarium, Grow Produce Store (food sourcing, sustainability), the L.A. Zoo (wildlife conservation), Tumbleweed (native plants and animals), Abalone Cove (marine habitat), and the Ballona Wetlands (wetland preservation). Other K-5 trips include the Tree People (forestation), Underwood Farms (agriculture), the L.A. Science Center (ecosystems), Catalina Marine Institute, and the Water Recycling Plant. 6th graders experience the Pali Institute outdoor science camp. STEM students attend CIMI camp in Catalina (7-8). High school field trips include King Harbor, Griffith Park, the Long Beach Aquarium, and Catalina.
- Environmental clubs sponsor Earth Week activities including: walking to school, packing
 trash-free lunches, creating reuse art projects, and completing environmental challenges
 at home. Joel Green, the host and producer of "Curiosity Quest Goes Green," filmed an
 episode of the PBS show at an MBUSD school, highlighting best practices to show other
 schools how to go green. Many students are passionate about the environment and
 have made videos and songs including: 'Pack a Trash Free Lunch' and 'Reducing your
 Carbon Footprint.'

Various environmental learning projects occur at every level. Examples include collecting change to support heifer cows in Africa and donating dresses after reading One Hundred Dresses (K-5). ASB led a Walk for Water campaign to support clean water in Africa (6-8). High school service trips include: the Galapagos Islands, Cambodia, Cuba, and Vietnam. All sites hold Pride Days to plant water-tolerant and other native plants. Each class has recycling bins and sites have lunch-sorting stations. Campus gardens are used for lessons. Water collection buckets are in classes to save for the gardens (K-5). Polliwog Park is used for physical education and the Botanical Garden for lessons on composting and native plants (6-8). In high school, the drip irrigation system, solar panels, and the grey water system are used in lessons. Students create an Environmental Impact Report (EIR) for a fake landfill site. The roof is used for air pollution tests and to grow plants for testing. AP Environmental and Marine Biology plan to perform testing in the ocean.

Element IIIB: STEM Content, Knowledge, and Skills

- Makerspace, a creative open space, is in place at all elementary schools. Students use recycled or reused materials to build innovative projects. Project Lead the Way, the nation's leader in providing hands-on, project-based STEM programming and professional development, is implemented in the District K-12. With the District's commitment to technology, emphasis has been placed on paper reduction at all sites. In 2012, K-8 introduced iPads for every student. 9-12 may use any device. The number of STEM classes offered at middle school was increased in 2014, due to huge demand. The environment and biofuels are major topics of discussion in these classes and students are required to complete environmentally themed science projects.
- The District approved AP Environmental Science as a new course five years ago, and it is now one of the most popular and most requested AP courses. 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. For the past seven years, one elementary school provides lessons to its students through the Grades of Green 3R Environmental Education program. 30 docents attend three workshops per year to teach the hands-on environmental lessons, which align with CA State Science Standards.
- Elementary schools sponsor environmental-based assemblies. These include Grades of Green, Recycle Rex, Heal the Bay's Watershed Protection, Environmental Defenders and Windows into the Water. 4th grade students District-wide study the effects of human interaction on the environment. They also study various biomes and their fragile interdependent systems and the use of renewable and nonrenewable resources. Kindergartens study the movement from farm to table. Sixth graders attend Science School at PALI, an outdoor education school in the mountains, where curriculum for the week includes the environment and sustainability.
- All students (grades 3-12) utilize electronic devices (3-8: iPads, 9-12: laptops, iPads, or phones) for homework, classroom assignments, and testing. All students compost and/or recycle and, starting in 2015, students sort food waste to send to a processing plant to be converted into energy. Through field trips to Ballona wetlands, Roundhouse and Long Beach Aquariums, Abalone Cove, L.A. County Zoo, Tree Musketeers, Ecostation, Grow, Catalina, and interaction with marine biologists, zoologists, and botanists, students K-12 are exposed to green careers. Through Science Fairs/Science Days in all elementary schools students explore greener technologies. Scientists from local companies judge projects and introduce students to careers in green technology and alternate fuels. All students K-5 harvest and help sell garden vegetables at school

- farmer's markets. All 6th grade students research alternative energy sources and present their research. Seventh and 8th grade STEM students participate in a science fair sponsored by Aerospace, Inc. All projects cover topics relating to alternative energies and local environmental issues.
- MBUSD grades 9-12 participate in the Southern California Regional Center (SCROC), which offers students courses which emphasize green career pathways. Landscape Nursery provides training in plant identification, Integrated Pest Management (IPM), landscape design, gardening, and cultivating vegetables. Students also may take Civil Engineering/Architecture. This Project Lead the Way course allows students to use state-of-the-art software to solve real-world problems, and to develop solutions to handson projects while considering environmental implications. AP Environmental Science and Marine Biology explore the drip irrigation system, solar panels, and the grey water system on campus. Students create an EIR for a fake landfill site. The roof is used for air pollution tests and to grow plants for testing. There are plans to test ocean water.

Element IIIC: Civic Knowledge and Skills

- Elementary student leadership teams choose organizations to support with clothing, toy, canned food, battery, and Halloween costume drives, including: Soles for Souls, Coins for Cows, Nickels for Nails (K-5), Walk for Water (6-8) E-waste drives (6-12). Mayor's Youth Council explores issues and career pathways in science, technology and health (9-12).
- Students at the high school wrote letters to Congressman Lieu to propose bans on BPA, BPF, and BPS to protect pregnant women and children that led to proposed legislation. Hydration stations are installed with City support (9-12).
- Community engagement projects include: Composting Classes in Botanical Garden (6-8) Organic Gardening and Composting (K-12), Heal the Bay trash clean-ups (K-12) West Basin Water District rain barrels and recycling education (K-12), and Grades of Green Youth Corp leading environmental projects (3-12).
- In January 2009, 40 students (3-8) initiated a City ban of single-use plastic bags and Styrofoam. The City was later sued by the "Save the Plastic Bag" coalition. The case went to the California Supreme Court and the City won. This landmark case, started by MBUSD students, allowed smaller cities to ban the plastic bag without an EIR. In 2014, five District students spoke in partnership with Surfrider Organization to convince the City Council to amend the styrofoam ban to make it the strictest ban in the country. Students participate in City-wide Earth Day festivities at Polliwog Park (K-12). Students participate on the City's Environmental Task Force, supporting green efforts. As a result, a new waste hauler contract was negotiated to include free recycling dumpsters and containers for all schools and free educational assemblies. The City helps support student gardens and composters for schools (K-5). 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 (K-12). MBUSD students man hydration stations at annual MB10K.
- All elementary students have outdoor instructional time in the Growing Great Gardens. Students receive lessons on the environment (water conservation, composting), farming (planting, harvesting, sustainability), and nutrition, all linked to academic standards in math, science, and social science. All District schools utilize outdoor space as classroom areas.
- All elementary students utilize outdoor patio areas adjacent to classrooms for nature studies, science workshops, science labs, reading, writing, and art projects. One

elementary has a dedicated outdoor classroom; another school uses outdoor open space for Grades of Green docent-led environmental activities. Fifth graders use outdoor venues to create conservation projects; topics include watersheds. 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 for lab activities to perform air pollution tests and grow plants. AP Environmental uses the grounds for testing a drip irrigation system, solar panels, and the grey water system. Students also create an Environmental Impact Report for a fake landfill site across from the school. AP Environmental and Marine Biology plan to perform testing in the ocean.

- K-12 students take many outdoor field trips: K: Round House, Marine Studies Lab, Aquarium, Grow the Produce Shop. 1st Grade: Tree People, L.A. County Zoo, Long Beach Aquarium. 2nd Grade: Underwood Farms and 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. 7th 8th grade: Catalina environmental trip for STEM. High school: Marine Science King Harbor, Catalina, Earth Science Honors Griffith Park, Long Beach Aquarium. Trips to Galapagos Islands, Cambodia, Cuba, and Vietnam.
- Growing Great Gardens educate students on the environment (water conservation) and farming (planting, harvesting, sustainability). Students grow vegetables, harvest, and host farmer's markets to give back to community. Three elementary schools have community gardens where community members work side-by-side with students and share knowledge and experience.
- Film students use outdoor venues to create teaching videos on topics like sorting trash and the impact of trash on the environment, which are shared with other students and members of the community.
- Students at the high school collaborate during outdoor business hours each week.
 Students meet at central tables outfitted with solar chargers and plan meetings and complete group projects. The Manhattan Beach Botanical Gardens are on school property and provide students and community members with access to lessons on composting and native plants.
- Grades of Green's Youth Corp program in all schools builds student environmental leadership by having members choose a green project to implement at their school. Some examples of projects: one student took photos of students being green and posted them on the school bulletin board. A Grand View student organized and led a beach cleanup. Two middle school student-led projects: one student led two e-waste drives diverting over 23,000 lbs. of e-waste from landfills and another connected with local resources to plant a native garden at the school entrance. A high school student spoke at local conferences teaching about waste reduction. Participation in beach clean-ups through Heal the Bay created awareness of the significant impact of cigarettes on our beaches and led to involvement of students to push for a smoking ban in Manhattan Beach.
- MBUSD partners with many local community institutions that help advance schools and the greater community:
 - The Manhattan Beach Education Foundation (MBEF) supplements state funding for MBUSD. In 2015/16, MBEF provided 9% of the District budget, including funding for STEM programming, Makerspace, Mindfulness training, physical education, smaller classes, music, reading and science specialists, etc.;

- The City of Manhattan Beach has provided funds to build gardens at elementary schools, purchase recycle containers, install bike racks around town, organize yearly Earth Day festivities, and provide robust afterschool enrichment programming, focused on health, wellness, and STEM, etc.;
- Chevron provided funding for MBUSD Science Teachers to participate in the Project Lead the Way training. District students attend annual beach clean-ups organized by Heal the Bay;
- The Boy Scouts built a wooden composter and an outdoor classroom and have planted drought-resistant plants during School Pride Day. The Girl Scouts also built chalkboards to display information in a reusable format, saving paper;
- Beach Cities Health District created the Walking School Bus program, sponsors the MindUp program and provides counselors for elementary schools;
- Windsong Trust provides MBEF with \$415K in funding annually to support counselors, librarians, and writing specialists;
- Blue Zones sponsors Healthy Kids surveys and encourages healthy choices through education programs and competitions between schools;
- Waste Management provides each 1st grade student in the District with a "Go Green Lunch Box" and is the impetus behind MBUSD's food-waste-to-energy program; and
- Local businesses have given time, money, and support to green efforts.



Examples of reducing environmental impact in MBUSD.





MBUSD students sort trash and make ecofriendly cleaning products.

