



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 District 2015-2018

Name of Superintendent: **Dr. Steven Keller**

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

District Name: **Redondo Beach Unified School District**

(As it should appear on an award)

Address: **1401 Inglewood Avenue, Redondo Beach, CA 90278**

Telephone: **310-937-1272** Fax: **310-372-5269**

Web site/URL: www.rbusd.org E-mail: skeller@rbusd.org

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

A handwritten signature in blue ink, appearing to read "Steven Keller", written over a horizontal line.

(Superintendent's Signature)

Date: 01/25/2017



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**
(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.

Date: January 31, 2017

(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 green.ribbon.schools@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.



Redondo 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 2017

PART II – SUMMARY OF ACHIEVEMENTS

Redondo Beach Unified School District, Redondo Beach, Calif.

High performance school buildings and grounds provide a sustainability context

The Redondo Beach Unified School District (RBUSD) consists of eight elementary schools, two middle schools, one high school, one continuation school, and one adult school serving approximately 10,000 students of diverse backgrounds. The ongoing goal of RBUSD is to strive for excellence in education through partnership; past traditions; and communication with teachers, staff, community members—and most important, the children of the City of Redondo Beach.

RBUSD is privileged to work with outstanding community partners who bring innovative programs to District schools, make concerted efforts to be eco-friendly, and are committed to helping fulfill the mission of educating the "whole child" in learning environments that foster health and productivity. RBUSD is committed to ensuring student and staff safety at school and in the home, promoting excellence in teaching and learning in modernized school facilities that provide model learning environments, maintaining high academic expectations for all students, and enhancing partnerships with the larger community.

Over the past ten years, two local bond measures have allowed RBUSD to upgrade and enhance buildings, grounds, and technology at every site. Many new facilities are LEED (Leadership in Energy and Environmental Design) certifiable or certified, including the Lincoln Child Development Center's Project Frog building; and the student services building, student union, and gymnasiums at Redondo Union High School. In construction, RBUSD maximizes the use of natural materials and resources, including recycled fibers and wood. Each school campus has solar shade structures, minimizing RBUSD's carbon footprint and saving money on the District's bottom line.

Beach Cities Health District (BCHD), a preventative care agency and a strong community partner of RBUSD, provides the District with a number of resources that demonstrate a commitment to wellness for students and staff. BCHD offers fitness classes, nutrition education, mindfulness, and purpose workshops to RBUSD staff and families. They also offer a comprehensive nutrition education program through the LiveWell Kids Nutrition Program learning modules, and Physical Education Specialists in grades K–5.

Elementary students and staff practice MindUP™, a research-based training program that teaches students to self-regulate behavior and mindfully engage in focused concentration required for academic success. RBUSD has focused on improving nutrition and wellness services to meet or exceed standards set forth by the Alliance for a Healthier Generation's Healthy Schools Program. Specifically, the District improved food services' offerings of low-calorie, sugar-free, low-fat foods and beverages, and replaced vending machines with healthier options. 100% of school cafeterias are Blue Zones approved by the BCHD. Every K–12 school has received recognition from the Alliance for a Healthier Generation, with one school recently reaching gold level. RBUSD and three District schools earned California Green Ribbon Schools recognition in 2016 for significant progress made toward whole-school sustainability.

Each school in RBUSD has established a wellness committee that plans and encourages healthy behavior among all stakeholders, including the implementation of staff wellness challenges, partnerships with area gyms and fitness centers, and an employee Wellness

Challenge to introduce employees to new types of exercise, activities, and healthy foods throughout the community.

Students in grades K–5 use school gardens to better understand the local ecology and environment. Students create service learning projects that continue to influence daily habits, such as plastic reduction, consciousness about waste, trash sorting, and plastic reduction. All 5th through 8th grade students have the opportunity to attend an outdoor science school. The principles and priorities of “Living Schoolyard Month” have become an integral part of the student experience in RBUSD. Student-led awareness campaigns and authentic activities are organized for students to engage in environmental awareness while celebrating the natural habitat.

A partnership with Chevron offers students Science, Technology, Engineering, and Math (STEM)-based classes at the secondary level. Using the Project Lead the Way (PLTW) curriculum, coupled with high-quality teacher professional development and outstanding partnerships, PLTW is helping students develop the skills needed to succeed in the global economy. Middle School students are selected for participation in Tech Trek, a science and math camp designed to develop interest, excitement, and self-confidence in young women. The AP Environmental Science class at Redondo Union is designed to help students better understand the relationship of physical science to the local and global environment.

The District is focused on green building standards, sustainability, and student health in facilities construction and modernization projects, including decisions about site selection, building design, and landscaping and grounds. As a result, schools seek to promote this vision among students, reflected by their experiences in and beyond the classroom. At the sites, classrooms are responsible for carrying out their own recycling, which is done by students rather than custodians. Students in grades 1-8 are responsible for monitoring and sorting compost, recycling, and trash every day during lunch. Students attend Grades of Green assemblies that teach them the impact of their trash on the environment as well as ways to drastically reduce trash by making small changes. Through eco-friendly decision making, strong community partnerships, and overall commitment to the "whole child" through learning experiences inside and outside of the classroom, RBUSD has reduced its carbon footprint while creating model learning environments.

PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE

Pillar I: Reduce Environmental Impact and Costs

Element IA: Energy

- RBUSD uses ENERGY STAR Portfolio Manager to track resource use. Guidelines are shared with staff at the beginning of the school year and prior to holidays and extended breaks. The Maintenance and Operations (M&O) team is committed to implementing effective and sustainable resources practices, exploring renewable and clean energy technologies, reducing energy and water consumption, minimizing utility costs, reducing the amount of consumable materials, encouraging recycling and green procurement practices, and promoting conservation principles.
- RBUSD has achieved a 47% reduction in greenhouse gas emissions since 2012.
- 100% of RBUSD schools have an ENERGY STAR score of 85 or above, with many of the schools in the high 90's.

- By comparing historical energy usage with current energy usage, RBUSD has shown a 5% decrease since 2012 in its total non-transportation energy use.
- 57% of RBUSD's energy is obtained via on-site renewable solar energy. RBUSD produces approximately 2 megawatts of solar energy.
- In the past ten years, with support from the Redondo Beach community, two general obligation bonds were passed. Measure C in 2008, for \$145 million, allowed RBUSD to make health and safety improvements, and build and/or renovate classrooms and buildings throughout the District. Measure Q in 2012, for \$63 million, allowed RBUSD to complete the investment in classrooms, infrastructure, and facilities.
- A majority of the new facilities in RBUSD are LEED (Leadership in Energy and Environmental Design) certifiable or certified, including the Project Frog building at Lincoln CDC; and the student services, student union, and gymnasiums at Redondo Union High School.
- The Lincoln Elementary Child Development Center is a Project Frog building. These easy-build "kits" meet the most stringent green certification criteria. By making schools more energy-efficient, RBUSD was able to reduce overall utility costs and put more money back into classrooms.
- Funds from local Measure Q have provided students with better learning environments by increasing student access to technology via one-to-one devices; all campuses have WiFi accessibility. Energy efficient upgrades and health and safety improvements to existing classrooms and facilities have improved the District's budget and the environment. Measure Q funded solar shade structures at each school site that both reduce the District's carbon footprint and save on the financial bottom-line.
- In order to reduce heat island effect, RBUSD has incorporated cool roofs into their design and construction guidelines; these roofs are light in color with a minimum 75% reflectance. California native shade trees also assist with classroom cooling.
- All RBUSD sites have been retrofitted to T-8 lighting, including an electronic ballast upgrade district-wide. There are a limited number of air conditioning units across RBUSD because of a typically mild climate. Air conditioned areas include administration offices, gymnasiums, technology labs, and modular buildings. All are monitored and thermostats are programmable for temperature and time. 100% of RBUSD sites use lighting with occupancy sensors.

Element IB: Water and Grounds

- RBUSD tracks its water usage through Cal Water and receives a monthly WaterSource report for each site. The overall score as of December 2016 is 79.4%. RBUSD is also in the process of having each site participate in Cal Water site surveys to help determine where the District can further reduce water usage.
- Cal Water's reports document a 7% reduction in indoor water usage and a 9% reduction in outdoor water use from 2012–13 to 2015–16. Over this same period of time, student enrollment increased by nearly 20%.
- One of the most significant water-saving measures in RBUSD was also one of the least expensive: each of the 300+ waterless urinals across RBUSD saves about 10,000 gallons of potable water per school year, which means 3 million gallons annually, or a quart of drinking water per day, for every person in the City of Redondo Beach. Low-flow toilets are used in new construction and nearly all existing urinals have been replaced.
- Another significant conservation move RBUSD has made is the installation of artificial turf on six athletic fields. These fields require no irrigation and only occasional "wash off,"

saving hundreds of thousands of gallons of water annually. At Redondo Union High School (RUHS), the lower practice fields contain ten 10'x10' water capture basins under the field to decrease the potential of flooding and recycle water.

- 100% of the landscape areas at District school sites have an irrigation system. Reclaimed water has been brought to RUHS and Jefferson Elementary to use for landscape irrigation.
- 100% of the turf area at RBUSD school sites is used for physical education or other educational purposes and all plants at RBUSD schools are regionally appropriate.
- 100% of the elementary schools in RBUSD have a school garden for an outdoor classroom where they explore pollination, photosynthesis, and seasonal planting. Also, the garden club at Perras Middle School meets weekly to practice gardening techniques. The RUHS campus has a native ocean friendly garden and ecology pond used by students in the Geoscience course as well as the AP Environmental Science class.
- RBUSD has been recognized by the West Basin Water District for water conservation efforts and the District's Water Reliability Program.

Element IC: Waste

- 21% of solid waste is diverted from landfilling or incinerating due to reduction, recycling, and/or composting. The monthly waste generated per person is 14.36 cubic yards. Waste hauling services are stopped or reduced during summer and vacation times.
- Nearly every school has trash sorting stations located next to their lunch tables. Students are taught what items must go in which bin and are encouraged to reduce waste by having trash-free lunches. Each site promotes and focuses on a "Trash Free Day" to continue sustainability messaging across District schools. School Garden Clubs participate in composting. Also, each school has their own Green Club or Green Team who has a system for creating mulch for their garden boxes.
- RBUSD has implemented a 1:1 laptop program, which decreases the use of paper across District schools. Students in RBUSD schools experience a nearly paperless education through the use of Google classroom and Google online suite. The recent curriculum adoption in mathematics includes an online textbook for students and staff. RBUSD staff has been trained in Google professional development to introduce more sustainable classroom practices. With the support of PTA groups, school fundraisers include reusable lunch bags or boxes. RUHS and Washington Elementary have installed refillable water bottle stations on their campuses. The food supplied by the cafeteria also leads to a reduction of waste with recyclable products and compostable trays.
- RBUSD takes care to limit the storage of hazardous materials such as motor oil, batteries (wet and dry), antifreeze, fluorescent lamps, and the chemicals in science departments at school sites, specifically at the secondary level where there are science labs. Safety Clean is used to dispose of hazardous materials. These materials are collected during non-student and staff hours. Also, the RBUSD Maintenance and Operations team is trained annually on the legal disposal of hazardous materials. All staff working directly with chemicals also attend OSHA training.
- All products in RBUSD's offices and classrooms are certified by a reputable agency and certified green. Approximately 15% of office and classroom paper is post-consumer and 90% is forest certified.
- 100% of RBUSD cleaning products are third-party-certified as green. RBUSD has a green schools operations plan that takes the initial cost, long-term potential cost savings, quality and performance of the product or service, health impacts, and the environment

into consideration. The District purchases and uses environmentally preferable products and services whenever practical. RBUSD uses questionnaires in bid proposals asking all vendors about their green inventory and participation in sustainable programs. Information from questionnaires is used to evaluate the overall bid proposal before awarding a contract.

Element ID: Alternative Transportation

- Via a Google survey distributed to students through their Chromebooks at RBUSD, it was determined that 30% of students walk to school; 10% ride their bikes or skateboards; 50% carpool with other students; and 10% use public transportation.
- In partnership with the Beach Cities Health District (BCHD), guidelines from the National Center for Safe Routes to School are followed to create Walking School Bus routes for all RBUSD K–12 schools. In partnership with BCHD, the RBUSD community is filled with marked bike and walk lanes and signage that promote “Streets for All.” Safe School Routes are posted on school websites and further promoted through supportive Parent Teacher Association (PTA) networks. 100% of schools have bike racks available for students and staff to safely secure their bike while at school. High school students also make use of the city bus line to and from school. RUHS has electric vehicle charging stations on-site.
- 100% of K–12 schools participated in International Walk to School Day on October 5, 2016.
- Since 2014, the RBUSD Maintenance and Operations department has replaced 100% of its fleet. New vehicles are more fuel-efficient, reducing their environmental impact by burning less fuel. RUHS has an all-electric service truck and electric golf carts are used by school safety officers and maintenance staff.

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

Element IIA: Environmental Health

- The RBUSD Board of Education has adopted an Integrated Pest Management (IPM) Plan with Policy 3512.4. The M&O team provides routine pest inspections and monitors pesticide usage by tracking and reporting their use in a department log. Spot treatments are used and all necessary pesticide use is communicated in advance and scheduled outside of school hours whenever possible. In addition, all treated areas are clearly marked.
- The state of California prohibits smoking on school campuses and in public school buses. Each school site has signage indicating smoking, including vapor/e-cigarettes, is prohibited on campus.
- RBUSD does not have elemental mercury, asbestos, or radon gas in District schools. Wood playground equipment has been replaced with plastic play structures that are regularly pressure-treated.
- In accordance with OSHA and the California *Healthy Schools Act*, RBUSD has a process for the handling and purchasing of chemicals. All cleaning products are water-soluble, well-labeled, and stored in secure locking custodian closets. The District uses Safety Clean to properly dispose of batteries, used oil, chemicals, etc. All art products bear the AP Seal of Arts and Creative Material, Inc., a certified non-toxic label.

- All classrooms in RBUSD have tack wall panels, carpeting, and acoustic tile ceiling (generally 45% sound absorbent) to help prevent unwanted noise from entering classrooms.
- Many of campuses have installed Solatubes to increase daylighting. This no-wattage solution not only saves dollars to spend on children, but also teaches students that innovation can save valuable resources. Classrooms are well-lit with natural light and have views of lawns, gardens, trees, and even the ocean in some cases.
- Classrooms have good humidity control; dehumidifying units are used where necessary. Science labs contain fume hoods to mitigate any potential contaminants and decrease possible humidity.
- RBUSD has a preventive maintenance program to ensure quality ventilation at each site. HVAC systems are inspected quarterly to ensure that airflow exchange rates are appropriate and ventilation standards are met. Filters and condensate pans, where applicable, are changed regularly. M&O staff is on-call to service any issues within 24 to 48 hours.
- RBUSD uses ProTeam backpack vacuums that use a multi-stage filtration system and HEPA filters, which stop mold spores and even some bacteria and viruses. RBUSD has been using proportioning systems for many years, which assists in dilution and the proper use of cleaning supplies. To further ensure the safety of students and employees, RBUSD switched to green-certified cleaning chemicals, with continued use of proportioning systems. Third-party certification for equipment and products comes from the American Lung Association, Carpet and Rug Institute, US EPA Design for the Environment, and Green Seal. The custodial staff is provided with regular training on proper use of equipment and chemicals to further improve their awareness and cleaning techniques.
- RBUSD is committed to ensuring good indoor air quality by maintaining adequate ventilation; using effective maintenance operations to reduce dust, mold, mildew, and other indoor air contaminants; and considering air quality in the site selection, design, and furnishing of new or remodeled facilities. RBUSD adheres to all EPA guidelines for mold remediation in schools. The RBUSD M&O team regularly checks buildings for moisture from leaks, condensation, and excess humidity. Each school in RBUSD uses a centralized facilities and maintenance website to communicate all facilities repairs.
- RBUSD has removed all window putty paints, roof flashings, and sealants in classrooms district-wide. Lead-based paint and plumbing are no longer used for any purpose.
- According to Cal Water Supply, the water meets all federal and state water quality standards. Drinking water plumbing was replaced during school renovation projects to decrease potential contaminants. Supporting the West Basin Municipal Water District in its conservation efforts is critical. RBUSD is responsible for protection of groundwater drinking supplies through the creation of a seawater barrier that keeps ocean water from contaminating fresh water in underground aquifers.
- RBUSD works to ensure any hazardous substances are inventoried, used, stored and safely disposed of on a regular basis and in a legal manner. Every effort is made to minimize the quantities of hazardous substances stored at each school and to substitute less dangerous materials for hazardous substances. Employees receive in-service training on hazardous substances in their work area at the time of their initial assignment and whenever a new hazard is introduced into their work area.
- RBUSD has taken a proactive approach to create and promote healthy learning environments for students and staff that will help to increase attendance rates and

reduce energy consumption. Using the Indoor Air Quality (IAQ) tools as a guide, the District has organized effective teams, communicated results, assessed building needs and potential risks, planned for the future, addressed any problems, and evaluated performance. Each month, custodians conduct an inspection of buildings and grounds at their site.

- Every elementary school in RBUSD has a valet system for student drop-off and pick-up that keeps traffic moving, rather than being stagnant. Valet is monitored by either members of the PTA or WATCH Dogs. Adams Middle School and Parras Middle School, have designated drop-off and pick-up locations for students that facilitate a constant flow of traffic at least 25 feet from school entrances. The RUHS campus has three designated drop-off locations for students. Each area is patrolled by RUHS staff to ensure vehicle idling does not take place. RUHS also has a designated bus lane and drop-off for field trips. There are a number of outdoor environmental steps including student awareness campaigns, Sharefest landscaping volunteer days, beach clean-up volunteer events, and ongoing landscaping maintenance.

Element IIB: Nutrition and Fitness

- 100% of RBUSD K–12 schools have been recognized by the Alliance for a Healthier Generation.
- The RBUSD nutrition program participates in the DoD Fresh Fruit and Vegetable Program, using entitlement monies to purchase fruits and veggies from locally-approved produce vendors. DoD maintains high quality standards through Produce Quality Audits, encouraging vendors to follow Good Agricultural Practices (GAP) and Good Handling Practices (GHP), and requiring that pre-cut and packaged produce is sourced from approved suppliers.
- All RBUSD K–5 schools have LiveWell Kids gardens. Maintained by BCHD's Garden Angels, a Garden Coordinator, and parent volunteers, the school gardens provide a place for students to not only explore planting, harvesting, and maintenance of gardens, but also pollination, photosynthesis, and seasonal planting. Students taste the fruits and vegetables that they harvest throughout the year. Elementary school students receive six LiveWell Kids Garden Education lessons each year, all of which are taught outside in the garden.
- BCHD supplements RBUSD's Farm to Table program by providing the entire student body with vegetables and fruits that are highlighted in the Healthy Pick of the Month. For instance, if the Farm to Table "Harvest of the Month" is kiwifruit, BCHD will supplement access to kiwi during lunch for the entire school site.
- The garden at Parras Middle School is maintained by a staff member. A garden club, comprised of students in grades 6–8, meets weekly to practice gardening techniques. During the summer months, the gardens are harvested and all produce is donated to local food banks. Some of the plants that are harvested are sold for fundraisers and some of the produce is utilized in the school cafeteria.
- At RUHS, the Ocean Friendly garden constructed using reclaimed water and California native plants was installed with the assistance of West Basin Water District using funds donated by Chevron.
- Elementary school students in RBUSD receive 60 minutes of PE one day per week from a PE Specialist, and participate in daily 8-minute morning activities five days per week, which totals 40 minutes of PE. Daily Morning Activities are exercise routines that are led by 4th and 5th grade students and completed by every elementary student in the school, as a group, first thing in the morning. The exercises are followed by 2 minutes of calm

stretching and 25 seconds of mindful breathing. Students also receive an additional 30 minutes of PE during the school week from their classroom teacher.

- Secondary schools in RBUSD have a designated PE class period, which meets for approximately 300 minutes per week. The Presidential Youth Fitness Program is used to assess, track, and recognize youth fitness and physical activity among all grades levels. The Fitnessgram assessment is used in 5th, 7th, 9th, and 11th grades as a way to measure students' health-related fitness, including cardiovascular endurance, muscular strength and endurance, and flexibility.
- The Redondo Beach Education Foundation (RBEF) supports health and fitness by sponsoring intermural sports at the middle school level.
- All RBUSD schools have an active School Wellness Council (SWC) that acts as an advisory group concerned with the health and well-being of students and staff. They meet five times per year and develop practical, simple ways to address various school components related to wellness. One way of doing this is to assess current school health, environment, programs, and policies in place, while identifying ways to strengthen these areas.
- A nutritional snack in the morning, lunch recess, and afternoon recess provide elementary students with additional opportunities for child-directed physical play on the District's well-equipped playgrounds. Many elementary schools have adopted "Recess before Lunch," allowing students to engage in physical play activities before nutrition while providing ample time to consume more fruits and vegetables and waste less food. At the secondary level, nutritional snack time and lunch recess provide students opportunities to work in the garden. RUHS offers over 25 sports from freshman to varsity teams as well highly competitive marching band and dance guard team, which also promote physical activity.
- BCHD, a preventative care agency and a strong community partner of RBUSD, offers fitness classes, nutrition education, mindfulness, and purpose workshops to RBUSD staff and families. In addition to this, staff is provided information through their health insurance, Kaiser Permanente. Kaiser offers a range of healthy lifestyle programs and provides wellness coaching, support groups, and discounted rates for fitness clubs, acupuncture, chiropractic, and other complementary care. In addition, staff are encouraged to use the top notch RUHS facilities to work out. From 2013–14 to 2015–16, RBUSD held an eight-week Wellness Challenge for staff, and an annual employee wellness event provided staff free health and fitness classes/seminars, healthy food samples, and the opportunity to connect with colleagues district-wide. Also, every staff member participated in heat illness prevention training.
- With the support of the BCHD, K–5 schools are implementing the Classroom Activity Break program. The goal of this program is to provide classroom teachers with the skills, knowledge, and resources needed to effectively integrate physical activity breaks into their daily schedule. BCHD provides an initial 60-minute training, a 30-minute booster training, and a weekly BCHD-led 3-minute activity break for any classroom that signs up for this support.
- Also through partnership with the BCHD, a Purpose Series is offered to high school students. The high-level goal of the series is to improve school connectedness for 10th and 11th grade students, specifically those at risk for non-engagement in school activities/clubs. The series allows students to explore their purpose and discover their interests and strengths through a series of classes and exercises. District schools also partner with Grades of Green, Hyperion Community Outreach, Tree People, Tanaka Produce/Farm, the Surfrider Foundation, and Heal the Bay.

- RBUSD uses the Alliance for a Healthier Generation's Healthy Schools Program as an assessment tool to guide school-based obesity prevention and health promotion. The Healthy Schools Program Framework of Best Practices is a version of the CDC's School Health Index. The modules include: School Health and Safety Policies and Environment; Health Education; Physical Education and Other Physical Activity Programs; Nutrition Services; Health Services; Counseling; Psychological and Social Services; Health Promotion for Staff; Family and Community Involvement. The Alliance also offers a customized action plan based on each school's individual assessment results and each School Wellness Council uses this action plan as a guide.
- Partnerships with the BCHD, Blue Zones, and the Alliance for a Healthier Generation help RBUSD to promote and support healthy eating and living for students, staff, and community at large. The BCHD LiveWell Kids program exposes students to practices that lead to the development of lifelong healthy habits that reduce or prevent obesity, and increase participation in physical activity and mindfulness. The Blue Zones Project® by Healthway is a community-wide approach to creating healthier and more productive citizens. RBUSD has Walking Moais groups district-wide, practices the Power 9 Principles, and participates in Purpose Workshops. Elementary students and staff practice MindUP™, a research-based training program that teaches students to self-regulate behavior and mindfully engage in focused concentration.
- The Redondo Beach Fire Department assists with fire and disaster drills. In the spring of 2016, the Redondo Beach Police Department provided all RBUSD staff with active shooter training.
- RBUSD students have daily access to a school nurse and counselor, as needed. Three school district nurses serve the district, along with a health clerk at each school site. If health issues arise, district nurses are called upon to assist with questions and concerns. District nurses and health clerks conduct annual health, vision, dental, and scoliosis screenings, as well as verify immunizations. The counselors and psychologists regularly provide social and emotional support counseling, including risk assessments. Each elementary school has either a full or part-time counselor; each middle school has two full-time counselors; Redondo Shores has one full-time counselor; RUHS has six grade level counselors, one at-risk counselor, and three school psychologists. Local agencies including Freedom4U, Thelma McMillen Center, and BCHD provide group support for students who need additional support for grief/loss, drug/alcohol prevention, finding purpose, coping/stress, and anxiety.
- RBUSD has a strong system of social and emotional supports for students and is initiating an implementation committee on social and emotional learning (SEL). At the elementary level, MindUP™ is implemented by all teachers with their own students. This program is one of the only programs accredited by the Collaborative for Academic, Social and Emotional Learning (CASEL). They all implement WatchDOGS and Peaceful Playgrounds. At the middle school level, clubs and programs like AVID and Where Everyone Belongs (WEB) support students' academic, social, and transitional needs. 6th grade classrooms are piloting the Second Step program, one of the only CASEL-accredited programs for secondary students. At the high school level, school counselors and psychologists support students in a variety of ways. There are over 100 student clubs, the LinkCrew for transition to high school, and Sprigeo for students to report bullying incidents and school safety threats.

Pillar III: Provide Effective Environmental and Sustainability Education

Element IIIA: Interdisciplinary Learning

- RBUSD believes that all citizens have a responsibility to be stewards of the environment and desires to integrate environmental accountability into all district operations. The District strives to promote green school practices that conserve natural resources, reduce the impact of District operations on the environment, and protect the health of students, staff, and community. In selecting and prioritizing strategies, consideration is given to the initial cost, long-term potential cost savings, quality and performance of the product or service, health impacts, and environmental considerations.
- The District is focused on green building standards, sustainability, and student health in facilities construction and modernization projects, including decisions about site selection, building design, and landscaping and grounds. As a result, schools seek to promote this vision among students, reflected by their experiences in and beyond the classroom. At the sites, classrooms are responsible for carrying out their own recycling, which is done by students rather than custodians. Students in grades 1-8 are responsible for monitoring and sorting compost, recycling, and trash every day during lunch. Students attend Grades of Green assemblies that teach them the impact of their trash on the environment as well as ways to drastically reduce trash by making small changes.
- Schools have embraced Trash Free Days where students are encouraged to bring trash-free lunches to school. Additionally, each site is developing a Green Campaign to further drive the messaging for their campus-wide efforts to compost and recycle by placing banners above the trash bins that direct students to place items in the appropriate bins during lunch and throughout the day.
- The Board of Education recognizes the importance of long-range planning for school facilities in order to help meet the changing needs of district students and to help ensure that resources are allocated in an efficient and effective manner. The passing of Measure C in 2008 and Measure Q in 2012 (described above) clearly demonstrate the District's commitment to promote environmental education, sustainability, and civic responsibility.
- At the elementary level, change and conservation are explored as part of their science curriculum; students deeply explore the relationship between natural and human communities. Energy, water, air quality, ecosystem management, agriculture and land use issues, waste treatment, and population are studied in various grades. BCHD garden lessons are integrated across various subjects.
- Students are taught about the drought-resistant plants located across campus and in the garden. The gardening lessons students participate in are a direct link into the various components and/or standards taught that focus on environmental and sustainability learning. In addition, students at all levels have the opportunity to join their school Green Team or Garden Club to promote awareness beyond the classroom to those students who have a deeper desire to impact the environment in a positive manner. The work done by these students impacts policies for all students; such as, encouraging plastic-free bottles, participating in waste-not days, increasing recycling bins and item sorting at lunch, and encouraging environmentally sustainable practices among staff members.
- At both middle schools, Project Lead the Way (PLTW) challenges students to problem solve, using their critical thinking and mathematical thinking skills to solve real world problems. At RUHS, the AP Environmental Science students have centered on water sustainability and waste issues. Student teams have completed the calculations needed;

researched viable solutions; designed gardens; and created videos, presentations, posters, and written articles and editorials to communicate their plans to the school and community. At RUHS, environmental and sustainability concepts are taught in the AP Environmental Science course (grades 11-12) as well as in Geoscience (grade 10). Critical issues such as climate change and conservation are explored in both, with the AP students further exploring the relationship between natural and human communities. Enrollment for AP Environmental Science—and the pass rate on the international AP Environmental Science exam—continue to increase.

- Teachers have also transitioned to paper-minimal classroom environments, using 1:1 Chromebooks for students to complete and submit assignments. In 2013–14, staff members underwent two days of Google training and continue to participate in ongoing professional development opportunities that support the use of the student Chromebooks and the Google Classroom to manage assignments.
- All K–12 schools have a student club or "Green Team" that facilitates recycling efforts at their sites and brings awareness to the importance of being environmentally mindful. Every 5th through 8th grade student has the opportunity to attend an outdoor science school during the school year. Through the support of the Redondo Beach Educational Foundation, 4th and 5th grade students district-wide receive hands-on science lessons from a science specialist. Field trips include visits to the West Basin Municipal Water Treatment Plant, Pacific Aquarium, Wilderness Park, and the California Science Center.
- Since 2007, RBUSD has partnered with Sharefest, a community-based organization to develop leaders of tomorrow, by fostering volunteerism in the community through environmental service projects district-wide. Water quality and sustainability issues are investigated using project-based learning. Renewable energy issues are explored using on-site solar arrays.
- Students in grades K–5 use the school garden to better understand the local ecology and environment. Students create service learning projects that continue to influence daily habits, such as plastic reduction, consciousness about waste, trash sorting, and plastic reduction.
- At RUHS, water quality and sustainable use issues are investigated using field studies and project based learning. The AP Environmental Science students conduct water quality testing in the fall semester at the Ballona Wetlands, in Marina Del Rey. They also conduct bi-weekly testing for fecal coliform bacteria for the local beaches, as part of a community service with the Surfrider Foundation.
- Renewable energy issues were explored at RUHS using the solar arrays on their campus. A guest speaker from the PSOMAS solar company discussed the sustainability of solar energy and guided students through a tour of solar installations in the main parking lot. In 2015, using a Chevron grant, a freshwater pond was installed to teach RUHS students across all science disciplines about freshwater ecology and sustainability.

Element III B: STEM Content, Knowledge, and Skills

- All eight elementary schools in RBUSD have robotics teams with over 100 4th and 5th graders participating in the FIRST Lego League international program. Students research a real world problem such as recycling or energy and are challenged to develop a solution. Students are immersed in design as they investigate topics such as sustainability, recycling, climate, and the environment, which gives them an opportunity to learn about different engineering disciplines. Such topics allow participants to be exposed to STEM principles.

- At both middle schools, PLTW challenges students to problem solve, using their critical thinking and mathematical thinking skills to solve real world problems. Each year, up to four middle school students are selected to participate in Tech Trek, a science and math camp designed to develop interest, excitement, and self-confidence in young women who will enter 8th grade in the fall. It features hands-on activities in math, science, and related fields.
- Adams Middle School students participate in CyberPatriot, a National Youth Cyber Education Program. The passage of Measure Q allowed the District to improve student access to computers and modern technology, upgrading inadequate electrical, network, and data systems, making energy efficiency improvements to provide relief to the District budget, construct new up-to-date classrooms, make health, safety, and security improvements.
- At RUHS, the AP Environmental Science students have centered on water sustainability and waste issues. Student teams have completed the calculations needed; researched viable solutions; designed gardens; and created videos, presentations, and posters; and written articles and editorials to communicate their plans to the school and community.
 - Stormwater runoff calculations: students measure the area, in square meters, of pervious and impervious surfaces on campus. They use these measurements to calculate the amount of water that will run off the campus in a typical 0.25-inch rain event and a large storm of 3 inches. They use this data to evaluate sections of campus for improvement in terms of stormwater capture.
 - Campus-wide water audit: students visit classrooms, locker rooms, the cafeteria, and student and staff bathrooms to calculate the amount of water used on-campus each year. They compare their measurements with the data provided by the District Office and the West Basin Municipal Water District and suggest areas for improvement in water conservation.
 - Rain garden installation and maintenance: born from the stormwater runoff data as an action project.
 - Ocean friendly garden installation and maintenance: born from the need to show the community alternatives to lawn as landscape. The garden is a showcase for drought-tolerant and California native plants, drip irrigation systems, and the role of reclaimed water in conserving water used outdoors.
 - Bacterial count of ocean water: water sampling, followed by lab testing of stormwater entering the beach at the stormwater drains along local beaches. Students measure the amount of enterococci bacteria entering the ocean at various sites.
 - Field study at the Ballona Wetlands: students perform water quality testing for variables such as dissolved oxygen, pH, salinity, fecal coliform bacteria, nitrates, and phosphates, and hypothesize the impact of the urban areas surrounding the wetland on water quality.
- At the high school level, outdoor learning is used to teach water quantity and quality issues, including mitigation strategies. The rain garden and Ocean Friendly garden at RUHS are used to teach about soil as a valuable resource and to provide hands-on learning so students can better understand agricultural practices such as mulching, drip irrigation, conservation tilling, the agro-ecosystem approach to pest management, and bioremediation. Population studies and biodiversity are also taught outdoors, as is air quality and the impact of highway traffic on air pollutant levels, especially ozone, SO_x and particulate matter.

- At all grade levels, environmental facts are taught as they relate to each other, so that students will understand basic ecological principles and appreciate the interrelated nature of living processes, the effect of human activities on ecological relationships, and the interdependence of humanity and nature. Schools are encouraged to incorporate classroom activities and school-wide programs that motivate students to recycle, conserve water and energy, use biodegradable materials when possible, and dispose of waste in an environmentally sound way.
- Staff are encouraged to provide students with opportunities to increase their understanding of science and the interdependence of living things through the study of endangered species in local habitats and through participation in projects related to this study.
- RBUSD students attend PALI Institute, Catalina Island Marine Institute, Camp Highland, and AstroCamp to name a few.
- With support from PTA groups, students participate in Hands On Art (HOA) projects that integrate environmental awareness across six lessons.

Element III C: Civic Knowledge and Skills

- RBUSD students' civic and community engagement projects integrating environmental and sustainability concepts include:
 - BCHD LiveWell Kids gardens at every elementary school. Students not only explore planting, harvesting, and maintenance of gardens but also pollination, photosynthesis, seasonal planting, and much more.
 - District E-waste and recycling and composting programs.
 - Student clubs and/or Green Team at all schools to facilitate and assess campus green efforts.
 - District-wide participation in Sharefest Annual Workday where students complete environmental and sustainability projects including the planting of trees, drought resistant plants and school gardens, repainting of lunch tables, and general campus clean up.
 - AP Environmental Science students participated in the International Coastal Cleanup in September 2015, using resources provided by Heal the Bay. The AP students at RUHS also help restore the Ballona Wetlands at least twice per year, removing invasive species; write articles and editorials about use of fossil fuels for the school paper; and have designed and installed a rain garden.
 - All K–12 sites have initiated a plastic reduction program where plastic water bottles on campus have been replaced with reusable metal water bottles students can use at school hydration stations.
- Leading the change they wished to see, RUHS student teams surveyed the campus, advised the administration of the number of recycle bins needed and the areas in which they should be placed. A media campaign at RUHS to change student behavior around lunchtime waste was developed to promote the sorting of waste into recyclables and materials headed to landfills.
- The elementary LiveWell Kids Garden program is supplemented by field trips to local parks, zoos, aquariums, and museums at all grades. RBUSD students in grades K–5 use the school garden to better understand the local ecology and environment. Students create service learning projects that continue to influence daily habits, such as plastic reduction, consciousness about waste, trash sorting, and plastic reduction. Additionally,

all 5th through 8th grade students have the opportunity to attend an Outdoor Science School Camp.

- The principles and priorities of “Living Schoolyard Month” have become an integral part of the student experience in RBUSD. Student-led awareness campaigns and authentic activities are organized for students to engage in environmental awareness, celebrating the natural habitat. RBUSD partners with the American Heart Association for annual heart awareness activities; Physical Education classes implement cardiovascular exercises; and Art classes integrate natural landscape projects.
- The STEM program at RUHS has created a number of internship opportunities at area engineering firms. Boeing hosts up to ten RUHS students each summer, who excel in the professional setting and return to the classroom with new ideas to implement change across campus.
- Partnerships with the following organizations help to deliver relevant projects, resources, or authentic audiences for students to show their work:
 - Beach Cities Health District: A preventative care agency and a strong community partner of RBUSD offers fitness classes, nutrition education, mindfulness, and purpose workshops to RBUSD staff and families.
 - Sharefest: Provides the resources on their Annual Workday to enhance school campuses by weeding, planting drought-tolerant plants, and painting.
 - CyberPatriot: With support from members of the Air Force Association (AFA), volunteers train students in coding for state and national competition.
 - Grades of Green: In 2012, Washington Elementary and Parras Middle School were winners in the Grades of Green Trash-Free Lunch Challenge.
 - Heal the Bay: Provides guest speakers for all schools, teacher training in watershed management issues, and field trips to local watersheds; also hosts the youth summit about oil drilling and provides resources for the international Coastal Cleanup Day.
 - Algalita Foundation: Partners in ocean plastic pollution education; provides plastic pollution toolkit and hosts youth summit on ocean pollution issues and solutions for RUHS students.
 - Surfrider Foundation: Provides the resources needed to install and maintain the Ocean Friendly garden at RUHS; also the resources needed to conduct biweekly bacterial counts of the ocean at various locations along Southern California beaches.
 - West Basin Water District: Provides funding for Ocean Friendly gardens at RUHS and buses to all schools for tours of their water recycling facility.
 - Friends of the Ballona Wetlands: Allows RUHS students use of the wetlands for water quality testing and conducts educational tours of the wetlands; students also volunteer in wetland restoration several times a year.
 - Tree People: Instrumental in providing a toolkit for researching drought-tolerant and native plants at Parras Middle School and for the rain garden at RUHS.
- District-wide, students practice recycling efforts in their classrooms and across their campuses. Students have taken the initiative to build sustainable habits and raise awareness about the importance of civic responsibility.
- To further support wellness and community engagement, RBUSD staff, students, and parents participate in the Skechers Pier to Pier Friendship Walk. RBUSD is well

represented at this amazing event that supports children with special needs and education.

- When it comes to fighting heart diseases and building a healthier generation, RBUSD stands out among all other districts in the state. In 2014, the RBUSD community raised over \$70,000 in donations for the American Heart Association. The RBUSD Superintendent was recognized by the AHA as the national Administrator of the Year, an award given annually to one Superintendent in the country for supporting the mission of AHA and for empowering young people to make a difference in the community. RBUSD is privileged to work with amazing community partners who are environmentally conscious.