

## School Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

#### School and District's Certifications

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

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

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

Public  Charter  Title I  Magnet  Private  Independent  Rural

Name of Principal: Mrs. Sarah Betz

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

Official School Name: Carrisa Plains Elementary School

(As it should appear on an award)

Official School Name Mailing Address: 9640 Carrisa Highway, Santa Margarita, CA 93453

(If address is P.O. Box, also include street address.)

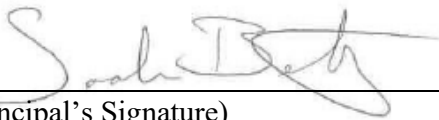
County: San Luis Obispo State School Code Number \*: 40 68700 6042907

Telephone: 805-475-2244 Fax:

Web site/URL: <https://sites.google.com/atasusd.org/carrisa/home> E-mail: [sarahbetz@atasusd.org](mailto:sarahbetz@atasusd.org)

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

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



(Principal's Signature)

Date: 1/28/19



Name of Superintendent: Mr. Tom Butler  
 (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: Atascadero Unified School District

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 that reads "Thomas A. Butler".

Date: 1/28/19

(Superintendent's Signature)

### Nominating Authority's Certifications

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

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

Name of Nominating Agency: California Department of Education

Name of Nominating Authority: State Superintendent of Public Instruction Tony Thurmond  
 (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.

A handwritten signature in blue ink that reads "Tony Thurmond".

Date: 2/14/19

(Nominating Authority's Signature)

### SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2021

### 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](mailto: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.



# *Carrisa Plains Elementary School*

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



Prepared by  
California Department of Education  
School Facilities and Transportation Services Division  
[Green Ribbon Schools Award Program](#)  
February 2019

## PART II – SUMMARY OF ACHIEVEMENTS

### Carrisa Plains Elementary School, Santa Margarita, Calif.

#### *A positive-energy campus for positive energy students*

Carrisa Plains Elementary School (Carrisa Plains) is a unique rural school situated on a high desert plain bordered by the Los Padres National Forest and the San Juan River on the west, the Temblor Mountain range and the San Andreas Fault on the east, and the Carrizo Plain National Monument on the south. The community is also home two of the world's largest solar plants, covering 13 square miles. BHE Renewables is located adjacent to and surrounding the school itself. The school serves one of California's most rural communities; students in grades TK-5 are served in three grade band learning environments: transitional kindergarten and kindergarten, Grades 1-3, and Grades 4-5. Eighty-two percent of students are socioeconomically disadvantaged.

The caring staff at Carrisa Plains is always looking for new and innovative ways to support the students; at the same time, they are providing opportunities for their students to help the world. Students and staff are learning about the world around them and working with and using their environment to promote a change in their education, their way of thought, and their way of living.

Much of this change at Carrisa Plains is carried with a clear conservation plan and a strong and supportive relationship with the Atascadero Unified School District (AUSD), headquartered more than 40 miles west of the school. Energy use at Carrisa Plains is controlled by a programmable energy management system, based on an Energy Conservation Plan that manages and reduces energy consumption at the school site. The school's Energy Conservation Plan follows the practices of AUSD's Resource Management Guide (RMG) and provides a guiding document for monitoring current energy conservation practices. Components of California's *Blueprint for Environmental Literacy* are also used as a guiding document for energy reduction. Staff uses these documents to guide and support Carrisa Plains' goal of providing continual and long-term environmental education grounded in sustainability to every one of their students.

The energy conservation practices of Carrisa Plains can be seen in the building and design of the site. In 2014, Carrisa Plains underwent modernization that installed an efficient and up-to-date building, high-efficiency technologies, and energy-reducing components to the school's infrastructure. Carrisa Plains demonstrates a 59% reduction in greenhouse gas emissions since November 2016. An on-site 30kW AC photovoltaic system installed in 2014 meets 100% of their electricity needs. Carrisa Plains is a positive-energy campus, producing more energy than it uses in a year.

Students and staff use resources in the school, district, community, and state to expand the site's ability to support students and inspire others. Partnerships with organizations cover a spectrum of health and safety issues from personal and family to community and global care. Organizations like Safe Routes to School and Rideshare have resulted in multiple opportunities for students to learn about the importance of transportation as a way to reduce pollution, nitrogen oxides, carbon monoxide, and other pollutants in the environment. With assistance from these organizations, students are able to participate in engaging small group discussions and hands-on activities.

Carrisa Plain's partnership with Cuesta College's Sustainability Resource Center has enlisted resources from the local community college to provide students with instruction using hands-on kits from the National Energy Education Development (NEED) Project. Classroom teachers are able to supplement their science instruction using the NEED kits free of charge. Through their implementation, students are exposed to and learn about renewable energy in a variety of ways. Participation in Pacific Gas & Electric's Savings by Design and On-Bill Financing programs has also provided a variety of resources and incentives to the district and school site towards making the school energy-efficient and informing students and staff about energy efficiency.

A changed way of seeing the world and living in it now exists in the minds of Carrisa Plains' students and staff. A no-waste ideology pervades the culture at Carrisa Plains and is the basis for much of their learning. Students and staff use the school's natural landscape, which is abundant in natural life, animals, and trees, for its ecological resources to implement the California Next Generation Science Standards. Fruit and vegetables grown on campus in the gardens are used to create foods from scratch for students and staff and allow students to have farmers markets. Water collection basins are stored on campus, students maintain gardens, and a vermicomposting system is in place that allows students and staff to reduce their waste. All students participate in outdoor education, from interacting with the greenhouses to daily interactions with vermicomposting, which is 99% student-led. Carrisa Plains' students take responsibility for their campus and learning.

Efforts to educate students, families, and staff about the importance of finding ways to reduce fuel consumption and air pollution are an essential component of reaching Carrisa Plains' goals. In the 2017 and 2018 school years, carpool signage and two new electric vehicle charging stations were installed on-site. Due to the location of Carrisa Plains next to a highway, traditional walking and riding to school is dangerous; however, the school has offered alternatives to traditional walking or biking to school, such as Walk and Roll Wednesdays and Walk with Me, which have enjoyed close to 100% participation and have emphasized alternative modes of transportation.

Health and wellness also remains a high priority at Carrisa Plains. Regular discussions occur between staff and students regarding the importance of taking care of oneself, eating right, and balancing career with healthy activities. Physical education and exercise are encouraged and practiced on campus, whether it's shown in bike riding on the bike path, walking around the track, or dancing to music played over the sound system during recess and lunch. There has also been a move away from packaged and processed foods and sweets in exchange for healthy foods made from scratch, fruits, and vegetables.

Efforts to support mental health are ongoing and updated according to current research. Students work weekly with social-emotional curriculum based on the nationally-recognized Caring School Curriculum. An on-site health clerk, who has been with Carrisa Plains for more than 20 years, is available to students throughout the school week, and there is year-round access to counselors and a psychologist. The California Healthy Kids Survey is administered annually to collect site-level data regarding areas of resilience, protective factors, risk behaviors, and school climate. Presenters and motivational speakers discuss self-esteem and character education.

Carrisa Plains' efforts to instill an environmentally-friendly way of thought and behavior in their staff and students have steadily gained support over time. Initially, students and staff were not utilizing the grounds to support student education, and there were a very limited number of outside organizations to support Carrisa Plains' students. Now, Carrisa Plains has many

systems in place and is always on the lookout for outside organizations and entities to support their efforts. At Carrisa Plains, students are offered a gateway to their current and future success through sustainability and environmental literacy.

## PART III – DOCUMENTATION OF STATE EVALUATION OF SCHOOL NOMINEE

### Pillar I: Reduce Environmental Impact and Costs

#### Element IA: Energy

- Carrisa Plains staff and stakeholders used various local and state resources to create their own Energy Conservation Plan to manage and reduce energy consumption. Their plan follows the practices of the Atascadero Unified School District's (AUSD) Resource Management Guide and serves as a guiding document for monitoring current energy conservation practices. Implementation of the Energy Conservation Plan is ongoing and overt, including behavior modification efforts as simple as turning off lights when rooms are unoccupied. Computers, printers, copiers, and other equipment are turned off at the end of each day and over long breaks to reduce energy use.
- AUSD also promotes daylighting and passive ventilation and has a strong sense of energy-related efficiency combined with fiscal responsibility and fully supports Carrisa Plains in reducing their energy use. In October of 2018, AUSD's Maintenance and Operations Department, Carrisa Plains, and Pacific Gas & Electric (PG&E) affiliate EcoGreen Solutions worked together to remove fluorescent lights and upgrade to LED lighting. In 2014, the installation of solar at Carrisa Plains allowed for the site to generate 100% of their electrical needs.
- Carrisa Plains facilities are controlled by a programmable energy management system. High-efficiency heating, ventilation, and air conditioning (HVAC) systems, equipment, and performance are monitored by EcoVox. Teachers and students assess current weather before running the heating and cooling systems.
- Using EcoVox data, Carrisa Plains demonstrates a 59% reduction in greenhouse gas emissions since November 2016. EcoVox analytics support Carrisa Plains, as well as other sites throughout AUSD, to track resource consumption using a tool called SkySpark. Carrisa Plains consistently ranks high on EcoVox's four-point scale when comparing the building metrics of the site's current usage with the site's usage intensity and control range from the previous year. Additionally, EcoVox works closely with the district's Maintenance Operations and Transportation Department to ensure rapid response to any HVAC issues.
- Since the 2014 installation of a 30kW AC photovoltaic system (PVS), approximately 100% of Carrisa Plains' electricity comes from the on-site PVS. According to EcoVox data, the PVS over-produces from March through October; then, the site uses electricity from PG&E in November and December. Overall, the site is positive-energy, producing more than it consumes. If interruption of transmission from the PVS occurs, PG&E supplies electricity to the site. In 2017, the PG&E portfolio minimum for renewables was 33%, including wind, geothermal, biomass, solar, and small hydro.
- With the support of AUSD, Carrisa Plains participates in the PG&E Savings by Design (SBD) Program that offers a variety of resources and incentives to the district and school site. SBD helped Carrisa Plains' building and design to exceed California's Title 24 energy-efficiency standards. Representatives from the SBD Program analyzed Carrisa Plains' energy processes and supported the development of high standards for efficiency goals and processes. Additionally, PG&E's On-Bill Financing (OBF) Program, a program utilized by

AUSD under the direction of the California Public Utilities Commission, has provided Carrisa Plains with a means to finance energy-efficiency retrofit projects.

- Carrisa Plains has also enlisted the support of Amanda Shere from the Cuesta Sustainability Resource Center to provide a high-quality education about energy. Every month, she teaches lessons using hands-on kits from the National Energy Education Development (NEED) Project. Since the NEED project supplement kits come free of charge, classroom teachers are eager to use them to supplement their science instruction, exposing students to energy concepts in a variety of ways and allowing them to discover how energy cycles through nature, is used by humans and is manifested in different forms, such as solar, wind, hydro, and fossil fuels.
- In 2014, a modernization project at Carrisa Plains added high-efficiency technologies and energy-reducing components to the school's infrastructure. The project met the California High-Performance Incentive Grant requirements and exceeded Title 24 standards by at least 20%. Contractors and subcontractors were careful to minimize construction debris, maximize construction recycling, implement appropriate stormwater handling measures, utilize efficient T-5 lighting, install High SEER HVAC equipment that set temperature ranges between 70 and 78 degrees, increase the insulation of the entire building envelope, enhance daylighting by providing 50% window covering in each classroom, and provide increased natural ventilation. New carpet tiles allow for easy replacement of individual tiles, rather than replacing entire carpeted areas. Areas not carpeted use an environmentally friendly floor covering called Marmoleum. The installation of low flow toilet valves, 2.4 gallons per flush, and low flow sink fixtures also took place during modernization, as well as the installation of the site's PVS.
- Safe Routes to School is one program that has allowed Carrisa Plains to reduce the heat island effect. This program provided Carrisa Plains with grant funds to resurface their asphalt, allowing for a "Bike Garden" to be installed and all remaining areas to be re-asphalted. Additionally, AUSD works with vendors who use materials containing heat sink colors, creating a reduction in the impact on the environment because of the product's green design. During modernization, contractors created a Cool Roof using single-ply white PVC materials to minimize the thermal load. The campus has very few paved areas (less than 20%). Approximately 65% of the remaining surfaces support a green model, including native plants, gardens, grass, fruit and shade trees, and a gravel track for exercise. Carrisa Plains utilizes the natural land to support learning and their sustainability efforts.

#### Element IB: Water and Grounds

- Carrisa Plains meters outdoor water use and purchases water for drinking and cooking through Crystal Springs due to poor local water quality. Staff encourages students to drink lots of water at school since many do not have the financial means to bring water with them or even have potable water at home. The small grass field at Carrisa Plains serves as the park for the community.
- Water use reduction is a top priority for staff and students at Carrisa Plains. When arborists cut down trees on Carrisa Plains because of illness or a safety hazard, the trees are chopped up for mulch. Recycled mulch covers the garden grounds and planter beds. Also, a service provided by AUSD allows for Cal Sense computerized irrigation controls to modulate irrigation according to weather. When errors are detected or problems found by site staff, the district's Maintenance Operations and Transportation (MOT) department responds quickly to reduce the amount of water wasted. Carrisa Plains has multi-occupancy restroom

fixtures that provide the site with low-flow toilet and urinal valves, low-flow sink fixtures, and some metered sink valves.

- Carrisa Plains' landscape is mostly made up of native trees, animals, plants, and shrubs. Approximately 10% of the school's 10-acre parcel is the building footprint. There are very few paved areas, excepting those necessary for parking, pathways, and student use. For play and physical education, students utilize a 1/3-acre grass area. There are also two gardens and a sensory garden that students use to grow a variety of fruits and vegetables for a school-run farmers market.
- After the approval of a grant through the Gateway to Green Schools program in 2017, Carrisa Plains purchased and installed five rain barrels to capture water for students to use to irrigate the garden. In 2018, the site began planting native plants and fruit-bearing plants in the school's main garden and throughout the site. Additional plants in the garden not used for consumption are native and drought tolerant. An irrigation system donated by Farm Supply of Paso Robles was installed with the help of students, staff, and the school's Sustainability Committee.
- Approximately 75% of Carrisa Plains' school grounds are learning areas for students to use in their educational development. For many years, students have managed two vermicomposting centers, providing the gardens with "worm tea" and helping the garden flourish, while keeping lunch waste out of the landfill. Water collection basins stored on campus are used to support the watering needs of the gardens.
- Recently, instructional time was set aside for students to create and design "habitats" for native animals to use as hideouts. Once the design phase is complete, students will use recycled resources to build and install animal homes throughout the campus. Students in kindergarten through second grade have begun creating bird feeders to provide additional sustenance to the local birds. So as to not disrupt the natural habitats on the campus, teachers and students discuss the importance of location choice for the animal homes and bird feeders. Fallen trees create seating and mulch for the outdoor learning atmosphere. This space is a cross-curricular science observation zone for students to connect their learning and real-life application. The location of Carrisa Plains is an excellent resource for students as it provides an abundance of ecological resources.

#### Element IC: Waste

- Carrisa Plains has calculated a waste diversion rate of 36.84%, including a cubic yard of compostable food waste diverted from the landfill each month.
- At the beginning of the 2015-16 school year, Carrisa Plains began to integrate a No Waste ideology that incorporates composting procedures into students' daily educational program. Each trimester, students perform a waste audit by gathering all waste materials used at Carrisa Plains for two days. Students and staff then sort and weigh the collected waste and discuss the implications of the amount of waste created by the site. These important conversations allow students to form ideas to create change in their habits and behaviors to reduce their environmental impact. Students formed the Green Team because of these conversations, with the support and guidance of One Cool Earth, a local non-profit that supports the development of school gardens and waste reduction. Student volunteers are in charge of sorting liquids, compost, recycle, and landfill items into the appropriate collection bins. Carrisa Plains generates a fair amount of mulch because of the ample number of trees on the campus. The rounds of trees that are cut down are also utilized for seating in the outdoor classroom.



- Waste disposal and recycling is tracked at Carrisa Plains by working closely with AUSD to meet site needs. Carrisa Plains has removed waste bins from classrooms; only recycle bins are available for student and staff use. This protocol is essential in helping to reduce errors in determining if an item is recyclable or waste and in turn will reduce the number of recyclable items entering the landfill. AUSD has also “self-recycled” since 1999. Fiscal benefit drives interest in the recycling program. Recycled tonnage provides \$8/ton revenue to AUSD as compared to the \$47/ton tipping fee for waste taken to the landfill. The district is proactive in the use of public auctions to sell off unwanted items, a process that diverts district surplus to the secondary market instead of the waste stream.
- Carrisa Plains and AUSD take the storage, use, and disposal of dangerous materials very seriously and handle these products with great care. AUSD provides comprehensive training for staff and trained service technicians to handle any chemicals or hazardous material. Batteries used for educational purposes are always stored out of the reach of students. Once depleted, cells are stored in containers in the office until returned to the Cuesta Sustainability Resource Center for proper recycling. Areas that are being painted are blocked off from students and properly ventilated. Paint is not stored on site; rather, remaining product is returned to MOT. Trained employees complete any necessary painting during non-student school days and comply with Cal OSHA guidelines. Gasoline used for grounds and maintenance vehicles and equipment is also stored away from students in a locked storage shed that has appropriate signage to warn others of the shed’s contents. Though it is unusual to dispose of gasoline, if such an occurrence were required, the materials would be sent to MOT for proper disposal. Staff takes measures to avoid spills through proper handling and care, and trained team members are on staff to handle oil or fuel spills and minor pick-ups. All staff know the procedures for handling large spills that need the assistance of hazardous materials vendors.
- 100% of Carrisa Plains’ office and copy paper is made of postconsumer material and chlorine-free. Custodians use microfiber cloths and mop heads to reduce the use of cleaners.

#### Element ID: Alternative Transportation

- Information about the transportation habits of students and families was gathered by observing and recording data over a period of multiple weeks. Because Carrisa Plains runs along Highway 58, transportation options are limited. The data showed one student lives on campus, and five groups of students carpool. (Carrisa Plains provides on-site housing for staff, eliminating long staff commutes to the rural site.)
- Efforts to educate students, families, and staff about the importance of finding ways to reduce fuel consumption and air pollution are an essential component of reaching the school’s sustainability goals. During the 2017 school year, temporary carpool parking and no-idling signs were installed; many of those signs became permanent in 2018. A section on the rules, expectations, and reasons for carpooling at Carrisa Plains was added to the Student Handbook, along with a no-idling policy.
- Though Carrisa Plains is a small campus, there is ample space to store human-powered modes of transportation (multiple rooms and bike racks). Despite location constraints, providing students with the opportunity to walk or ride their bikes to school is a goal of the site. The staff is working with MOT to install a gate along the fence farthest from the school, which will allow a staff member to provide supervision on Walk and Roll Wednesdays. Families can then be encouraged and reminded of the alternate drop-off location half a mile

from the regular entrance to the school. Installation of additional signage will communicate the alternate drop off zone.

- During the 2017 school year, AUSD installed two electric vehicle charging stations at Carrisa Plains, which were acquired through the Solar Projects grant from the San Luis Obispo County Air Pollution Control District. Faculty and staff utilize the charging stations daily.
- Carrisa Plains' partnership with Safe Routes to School and Rideshare has resulted in multiple opportunities for students to learn about the importance of transportation as a way to reduce pollution, nitrogen oxides, carbon monoxide and other pollutants in the environment. In 2017, Carrisa Plains held three bike or walk to school days, with all reaching at least 95% participation. During the 2018 school year, monthly Walk and Roll Wednesdays occurred with 100% participation at these events. Staff also provides time before school, during recess and lunch, and after school to utilize the 1/8-mile track or bike on the newly painted bike path. The site purchased six bikes that students use daily so that 100% of students have the opportunity to ride a bike while at school during the week. Since 2016, Carrisa Plains has partnered with the County of San Luis Obispo Health Department to host Bike Rodeos where students learn and improve upon their bike riding skills by participating in a bike safety training day and assessment.
- When buses are needed to transport students for field trips or other events, the staff works to fill all seats. Carrisa Plains achieves this by partnering with Creston Elementary School to reach the capacity of buses.

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

### Element IIA: Environmental Health

- Integrated Pest Management (IPM) practices are performed at Carrisa Plains through pest identification and monitoring pest presence. Pests are documented through visual counts and sticky trap collection data to determine the precise pest type and to gain an understanding of the average number of pests in the area. Chemical pesticides are not routinely applied at the school. Practices to prevent an increase in pest presence include ensuring waste is only in proper storage devices, tending to leaks and cracks, installing barriers and traps, and managing resources that draw pests to the site.
- Carrisa Plains and AUSD are working together to minimize exposure to hazardous contaminants. Smoking any products is prohibited at Carrisa Plains and on school buses. Fluorescent lights from lighting fixtures were removed and replaced with LED lighting. Thermometers and thermostats are mercury-free, along with purchased batteries. Old cells are kept out of the reach of students, removed from battery-operated equipment when they are not in use, and regularly recycled. Trained district staff monitors and maintains fuel-burning or gas-burning equipment that is necessary for the day-to-day operation of the school. Asbestos inspections are done biannually by AUSD and triennially by the district's insurance carrier. Chemicals are only for cleaning purposes, not educational purposes, and used by trained custodial staff only.
- Staff uses various environmentally-friendly cleaning products, such as Clorox Greenworks Multi-Surface cleaner (EPA recognized for Safer Chemistry), Lemon-quat (EPA registered) with disinfectant, and Simple Green (non-toxic, biodegradable).
- Carrisa Plains Elementary School has good acoustics because of high ceilings, newly remodeled classrooms, Fabricmate wall surfacing material, quiet HVAC systems, and a high noise reduction coefficient. All buildings have ample daylighting; LED lighting is available when needed.

- Direct Expansion air conditioning provides ample drying to reduce high humidity levels in Carrisa Plains' buildings and classrooms. High ceilings, windows, and open doors provide ample ventilation. Skilled technicians provide regular preventative maintenance for all HVAC equipment. Carrisa Plains utilizes a computer-based work order management system to support the facility.
- At the frontline of protection from asthma triggers, Carrisa Plains is a smoke-free zone. Animals on campus are limited to service animals or animals that pose no allergen risk to students. Students with asthma have their doctor complete a medical plan that is kept in the school office and followed by staff according to each student's medical needs. There is an asthma triage plan kept on-file in the school office, limiting outdoor activities when the air quality is poor.
- Cleaning is done when rooms are unoccupied so fumes from cleaning have the appropriate time to dissipate. Doors remain open during the cleaning process and for an hour and a half after cleaning with chemicals. Cleaners are sprayed directly on microfiber cloths, reducing the amount of airborne chemicals. Horsehair vacuum attachments remove dirt in high locations to reduce asthma triggers, and vacuuming of classrooms occurs twice a week. Custodial staff uses dry microfiber towels after they have cleaned with Joy soap and hot water to ensure no soap residue remains on the tables. AUSD uses pleated filters in all HVAC operations, and Carrisa Plains uses 2-inch filter units in virtually all equipment. Trained custodial staff resolves leaks that cause moisture problems immediately.
- Creating safeguards against leaks at Carrisa Plains is a high priority at the district and school site. On the rare occasion a leak forms, staff swiftly handles the issue using dehumidifiers and carpet-drying fans that the district has available. Similarly, MOT staff can replace sections of carpet for efficient cleanup of moisture and mold, should the need arise.
- Safeguards and procedures are put into place to prevent exposure to lead contaminants and to ensure the building facilities are lead-safe. Modernization at Carrisa Plains in 2014 showed lead levels did not require abatement but did require skilled and knowledgeable workers.
- Because the well-water at Carrisa Plains is not safe for potable consumption, the site utilizes Crystal Springs Water Company for staff and student drinking water. Water is kept in Crystal Springs storage bottles until opened for use. Water protection occurs by the filtered water dispenser inside the cafeteria. Crystal Springs, a local company in San Luis Obispo, takes great care to ensure safe and clean drinking water. Their water goes through a natural purifying process that keeps essential minerals intact. Their bottling process mixes the natural spring water with steam-vaporized distilled water. After the mixing, the water is micron-filtered down to one micron, U.V. sterilized, and ozonized for purification and to keep the integrity of the minerals in the water.
- Carrisa Plains reviews EPA's Indoor Air Quality Problem Solving Toolkit quarterly, and has used the EPA's IAQ reference guide to ensure practices around mold, radon, asthma, and AUSD's IPM efforts prevent widespread illnesses from occurring.

#### Element IIB: Nutrition and Fitness

- Carrisa Plains works with Alliance for Healthier Generation to support nutrition goals and expectations. Carrisa Plains has also promoted and supported programs such as Reimagine Recess and resources such as 15 Minutes to Healthier Habits. Carrisa Plains is working with AUSD to provide students with fresh, local fruits and vegetables and fresh farm to school produce from the district's garden to support a Farm to School Program. Carrisa Plains' garden offers a wealth of produce and fresh chicken eggs for students to consume. AUSD

ensures that the food service department follows the United States Department of Agriculture Food and Nutrition Service guidelines for providing healthy meals to students with information on breakfast and lunch programs and assistance with paying for meals. The district-wide wellness policy is comprehensive and provides staff, students, and families with nutritional information for all meals served throughout the district. Students have participated in "Agriculture Adventure," and with help from the San Luis Obispo County Farm Bureau, students have learned where their food grows. Carrisa Plains' staff works with the San Luis Obispo County Health Agency to provide students with nutrition education. Staff and students frequently discuss the importance of healthy food and snacks. Per the Wellness Policy, celebrations have moved away from cakes, candies, and sugary treats to creatively displayed fruit and vegetable snacks.

- The Carrisa Plains campus has ample space to support gardens. The main garden is home to a chicken coop, raised food beds, a greenhouse, two compost bins, and an outdoor classroom. Five rain barrels that collect water are used to irrigate the garden's plants, fruits, and vegetables. The garden, though still in use, is currently under construction, with students helping to re-design the space and make it a more productive area for learning. The new construction includes the addition of more fruit-bearing trees and native plants, the expansion of the chicken coop, and the addition of covered areas for the outdoor classroom. Staff and students began construction of the sensory garden in 2018. The sensory garden provides students a calm place for learning and meditating. Recycled or recyclable materials created the foundation for the sensory garden.
- Carrisa Plains also has an on-site commercial grade kitchen that provides students with multiple opportunities to create items for consumption from scratch. Students can interact with the process of cooking and baking from start to finish while gaining an understanding of how and where their food grows. Entrees, salads, and snacks made by students use fresh eggs, fruits, and veggies from the garden. In addition to creating meals on campus, a monthly student-led farmers market provides a forum for students to sell eggs, vegetables, fruits, and a variety of other items from the garden.
- Students receive a minimum of 130 minutes of physical education per week, 95% of which is outdoors. During inclement weather, indoor PE instruction includes yoga. Throughout the day, students participate in brain breaks in the classroom using Gonoodle or Jack Hartman, and other types of developmentally appropriate exercise videos. When music is played over the sound system during recess and lunch, students can often be found moving and dancing on the playground. Students' physical education happens throughout campus, whether it be walking on the 1/8-mile track or riding on the painted bike track. Fourth and fifth-grade students participate in California's Physical Education assessment. Physical education outside of the regular PE time is ongoing; students bike, walk, run, and jog. The school received a grant for four baskets and all the tools necessary for students to play Disc Golf. Students have access to yoga mats that they can use for meditation and exercise. Outside of the school day, 30% of the student population participates in the local Hares and Hounds 5k run.
- Carrisa Plains has a Wellness Committee representative that meets with the District Wellness Committee quarterly to discuss various ways of promoting wellness. The representative shares information during staff meetings and through the parent newsletter and school website. The Parent-Teachers-and Friends (PTF) association has embraced a Non-Junk Food ideology.
- All students participated in the Sun Wise program in 2018, learning their role in protecting their skin through sun-safe behaviors. Staff members encourage one another and students

to wear sunscreen and hats while outside. The site administrator has provided oversized umbrellas for staff members to use while not in a classroom.

- Carrisa Plains' garden projects support students in gaining an interest in the process of being conscientious about their environment and the world around them. All Carrisa Plains students participate in outdoor education, from interacting with the greenhouses to daily interactions with vermicomposting, taking responsibility for their campus and learning. Two to three times per week, the outdoor learning area provides teachers and students the opportunity to write, read, think, observe, and wonder while outside. They can then take this knowledge and make deeper connections during field trips.
- Health and wellness remain a high-priority for staff and students at Carrisa Plains, and regular discussions regarding the importance of taking care of oneself while balancing career with healthy activities often take place. On Tuesday mornings, staff is offered a "Walk with Me" program on the school's outdoor track; participation rates average about 90%. Staff are also provided with yoga balls and various exercise equipment from Carrisa Plains partnering with local organizations.
- Friday night social dinners are scheduled by staff, promoting a positive working relationship. At Carrisa Plains, quality nutrition plays a part in the school culture and climate. For the past four years, due to the hard work and organizational skills of Mrs. Debbie Twisselman and Mrs. Jani Kasfeldt, 100% of the staff comes together every month to share and introduce new meal options. This sharing of food creates an environment that promotes a healthy body and mind and supports staff members' emotional well-being. Staff also has access to a salad bar that includes many healthy choice options. Additionally, staff uses the online Midweek Memo to share strategies for increasing overall wellness week-to-week and year-round.
- Carrisa Plains addresses the eight components of the Coordinated School Health approach throughout the year. Para-educators and teachers provide students with cooking classes using food from the garden. These classes include food safety components including sanitation, fire, and knife safety. Every year, staff gives all students a reusable water bottle. Fifth-grade students have health instruction and participate in maturation education. Staff provides students with opportunities to understand the necessity of a safe school environment. Presenters such as motivational speaker Retro-Bill discuss self-esteem and character education through anti-bullying messages.
- Carrisa Plains follows a Positive Behavior Intervention and Supports model, a multi-tiered system of support to improve social, emotional, and behavior support for all students. Additionally, students participate in Red Ribbon Week, a week-long education program during which they receive anti-drug and alcohol education. All students have access to a site-assigned psychologist and counselors. Carrisa Plains has also partnered with The Link of Atascadero to provide further assistance and connect families with resources, counselors, psychologists, and social services.
- Staff members provide an abundance of opportunities to be outside in the sunlight and fresh air, which is shown to improve mental health and well-being. Through the support of Carrisa Plains' Sustainability Committee, the staff has increased environmental education 100% for all students over the past three years. To include parents, Carrisa Plains holds four parent and family nights each year. A Foster Youth Liaison is provided by AUSD for families when needed. Every year, all staff participates in safety training, and the Safety Committee helps to create a Comprehensive Safety Plan for the site. There is dedicated time during the school year to promote team building and discuss ways in which staff members take care of their own personal mental and physical health.

- Carrisa Plains has worked with a number of organizations to provide experiences they might not have otherwise had. Twin Cities Community Hospital provides third-grade through fifth-grade students with education on the importance of handwashing and the impact proper and careless handwashing has on the health of people. Another partnership formed in 2016 with a local Atascadero dentist, Pure Pediatric Dentistry, provides students with education on the health benefits of proper dental hygiene, and provides each student with a toothbrush, toothpaste, and floss. Carrisa Plains partners with local fire and law enforcement to provide all students with information on how to be safe, how to prevent a fire or be safe during a fire, and how to call 911 in an emergency. Carrisa Plains has worked with nonprofit organizations such as the Dairy Council, One Cool Earth, Woods Humane Society, PG&E, and Fire-Up-Your-Feet to cover health and safety topics in regards to proper nutrition, animal care, and exercise.
- Students' social, emotional, and physical well-being is a high priority at Carrisa Plains Elementary School. All students at Carrisa Plains have access to a health clerk and a district nurse five days a week. Carrisa Plains' on-site health-clerk has extensive and up-to-date training to support the needs of students and has supported the needs of the students for more than 20 years. Students have access to counselors through the district's partnership with The Community Counseling Center (CCC) of Paso Robles where they can receive support and request services in emotional, social, and behavioral needs throughout the year. Additionally, the school psychologist provides bi-weekly social groups to some students to enhance their understanding of how to support their mental health and behavioral needs to succeed in a safe, healthy, and supportive learning environment. Social groups run throughout the year where students work on social norm scenarios, and gain skills to help them increase their social skills.
- Recently, Carrisa Plains has implemented Newsela, a social-emotional curriculum focused on helping students at their independent reading level in the third and fifth grades. All students interact with this curriculum weekly. Carrisa Plains continues to use Caring School Community Curriculum, a nationally recognized, evidenced-based curriculum that provides students with tools to create healthy relationships with peers and develop essential social skills. The program improves students' emotional connectedness to school by utilizing a "buddies" program, home-school connection, and a school-wide component that teaches students respect and ownership for their actions and behavior.
- To support a positive school climate, Carrisa Plains implemented a Positive Behavior Interventions and Supports program (PBIS), LiveSchool, to provide in-the-moment data on student behavior with the goal of supporting improvements of school culture. AUSD's technology department supports the site by communicating when "cyberbullying" comments are occurring using district technology. Teachers, students, and families are made aware of the resources available at [Stopbullying.gov](http://Stopbullying.gov).

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

#### Element IIIA: Interdisciplinary Learning

- Through collaborative efforts of Carrisa Plains' Sustainability Committee, staff and students are creating a formal written document that communicates learning outcomes for all students, TK-5<sup>th</sup> grade; the completion date for this document is the end of 2018.
- In conjunction with California's *Blueprint for Environmental Literacy*, Carrisa Plains utilizes AUSD's Resource Management Guide, which includes attainable goals, to guide practices and inform decisions. For example, providing students with increased access to fresh,

healthy, and locally grown foods is a goal Carrisa Plains is actively working to achieve this school year.

- Since Carrisa Plains started implementing the California Next Generation Science Standards (CA NGSS) in 2015, the site has taken steps to ensure that all future employees can integrate environmental education instruction into their classroom. Carrisa Plains' teachers have dedicated themselves to enhancing their practices by engaging in professional development offered by California Polytechnic University (Cal Poly), Earth Genius, Cuesta's Sustainability Resource Center, and other organizations dedicated to enhancing teachers' ability to support the needs of students in the classroom.
- Carrisa Plains implemented California's Environmental Principles and Concepts in 2015, providing all students instruction through the lens of environmental sustainability. Other policies at Carrisa Plains include providing all students garden education, outdoor education, and supporting the Green Team.
- AUSD's vision is to ensure students will be college, career, and citizenship ready through talent and teamwork. This thinking guides Carrisa Plains' vision and plans for new and ongoing practices and policies. By creating students that are citizenship ready, staff is preparing them to think about their impact on the world around them. Through the lens of environmental leadership, Carrisa Plains students conscientiously interact with the environment.
- Staff have received professional development for Mystery Science, an online curriculum they use to activate students' curiosity by implementing the scientific method to support learning on environmental and sustainability topics. All classrooms use hands-on energy science kits from the NEED Project.
- Because Carrisa Plains is a small school, staff can provide small group instruction to all students at least twice a week in the garden, answering all of their questions and meeting them at their academic abilities, and differentiating along the way using specific standards in science, math, and ELA to guide instruction. Through lessons on animals, worms, worm bins, compost, seeds, prep, and harvesting, teachers and paraprofessional educators provide the sequential process for students regarding ways that gardens help us survive, thrive, and grow.
- Teachers integrate summative and formative assessments that summarize or drive student learning, creating opportunities to modify content and curriculum, or indicating a need to teach or re-teaching high-interest concepts or those students are struggling to master.

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

- The Mystery Science curriculum is used for students in Kindergarten through fifth grade. These lessons include:
  - Kindergarten students develop the habit of becoming weather watchers who take notice of weather patterns and predict changes. Students develop the concept that animals and plants need things to survive, and their lives are all about meeting those needs.
  - In first grade, students explore the properties of light and sound. They learn how plants and animals survive and that every animal and plant has parts and behaviors that help them to grow and meet their needs.
  - In second grade, students develop the idea that taking advantage of the properties of materials solves many problems in our lives.
- Through hands-on investigation, students explore the material properties involved in meeting basic needs. Students develop their understanding of biodiversity—the sheer range

and variety of animals found on Earth. Students gain practical experience in identifying animals and sorting them into scientific groups and apply their knowledge in an engineering design challenge. For example:

- In third grade, students study how plants reproduce and pass on their traits. They learn forces will let them do surprising things, building a sturdy bridge from paper to using the pull of a rubber band to send a cardboard “hopper” flying.
- In fourth grade, students develop an appreciation for the processes that shape the Earth’s surface.
- In fifth grade, students learn how the Earth is moving through space, both spinning on its axis, and traveling in an orbit around the Sun.
- Throughout the investigation process, students engage in actual and simulated observations of the sky, and they participate in the process of inquiry: beginning with observations, debating a range of possible causes, and developing possible conclusions.
- NEED kits address curriculum and instruction in the areas of magnetism, soil composition, climate lessons on weather and seasons, using data to determine if landscaping is ecologically friendly, wind energy, solar energy, and hydropower through the lens of hands-on projects that incorporate math, engineering, reading, and writing.
- Instructional time was recently set aside for students to create “habitats” for native animals to use as hideouts. Once the design phase is complete, students will use recycled resources to build and install animal homes throughout the campus. Students can gain an introductory level understanding of the employment opportunities available in various fields of study because of this curriculum.
- Students have 1:1 Chromebooks beginning in kindergarten, and the use of paper at Carrisa Plains has decreased by 50% since implementation. Technology-supported learning prepares students for the future. Students in third through fifth grades participate in Hour of Code.
- Carrisa Plains started a robotics club to supplement the engineering curriculum embedded in Mystery Science. The robotics club makes connections between the robots students build and the ways coding and robotics construction applies to the world around them.
- Through field trips and non-profit partnerships, students meet and learn from professionals who work at parks, farms, aquariums, outdoor school, and in the environmental non-profits. Organizations such as One Cool Earth, Integrated Waste Management, San Luis Obispo Council of Governments, Woods Humane Society, San Luis Obispo’s Integrated Waste Management Authority, Twin Cities Community Hospital, San Luis Obispo County Sheriff Department, Cal Fire, yoga instructors, and Cuesta Sustainability Resource Center expose students to a variety of career opportunities. Addressing job options as students learn is a significant component of the AUSD Graduate Profile, working to guide students into becoming career and college ready individuals who can contribute to society.

### Element IIIC: Civic Knowledge and Skills

- Carrisa Plains students are dedicated to their student-led farmers market, a place to sell eggs, vegetables, fruits, and a variety of other offerings that incorporate items from the garden. The school recently established monthly opportunities for students to support their school at Garden Works Days, during which students volunteer their time to helping their school garden by raking, shoveling, and cleaning up. Moving forward, Carrisa Plains plans to implement a requirement for each student in third through fifth grade to complete a community service project geared towards supporting the Carrisa Plains and California



Valley community as well as the environment. The school uses EPA's "Service-Learning: Education Beyond the Classroom" resource for ideas on civic activities for students in all grades.

- All Carrisa Plains students use the greenhouse, vermicompost, recycle, perform waste audits, conserve water, and use rain capture barrels while at school. While learning about soil, food webs, garden design, animals, ecosystems, recycling, oil spill cleanup, storm water runoff, insects, climate, mulching, students enhance their learning, understanding, and application in creating positive change. Excited to learn about their local environment, the staff and students of Carrisa Plains Elementary School foster local ecological literacy through time spent at Carrisa Plains National Monument. Since Carrisa Plains' team is extremely familiar with the monument and what the surrounding area has to offer, they act as docents on trips. Students learn about the endangered species, plant life, animal populations, and their habitats, as well as the current and past ecological reserves in the Carrisa Plains and California Valley.
- In celebration of Living Schoolyard Month in May, Carrisa Plains uses the Living Schoolyard Activity guide to inform instruction; each grade level uses lessons twice weekly. These activities cover a range of topics from social-emotional well-being to watershed stewardship. This year, students will incorporate a science fair and display many of the events and accomplishments achieved throughout the school year.
- School garden projects support students in gaining an interest in the process of being conscientious about their environment and the world around them. Two to three times per week, the outdoor learning area provides teachers and students the opportunity to write, read, think, observe, and wonder while outside among the plants, animals, and the world around them.
- A student-led Green Team is responsible for the school's two vermicomposting centers that provide gardens with "worm tea" and help them flourish while keeping lunch waste out of the landfill. To support the watering needs of the garden areas, students use water collection basins. Students then use the produce and products from the garden to provide a low-cost Farmers Market to the families and community. They can then take this knowledge and make deeper connections during field trips.