

City of Ventura

Environmental Sustainability

Green Schools Program Report

2017- 2018

AUGUST 9

Authored by:

Brandon Kaysen, Environmental Specialist

Angie Williams, Environmental Assistant

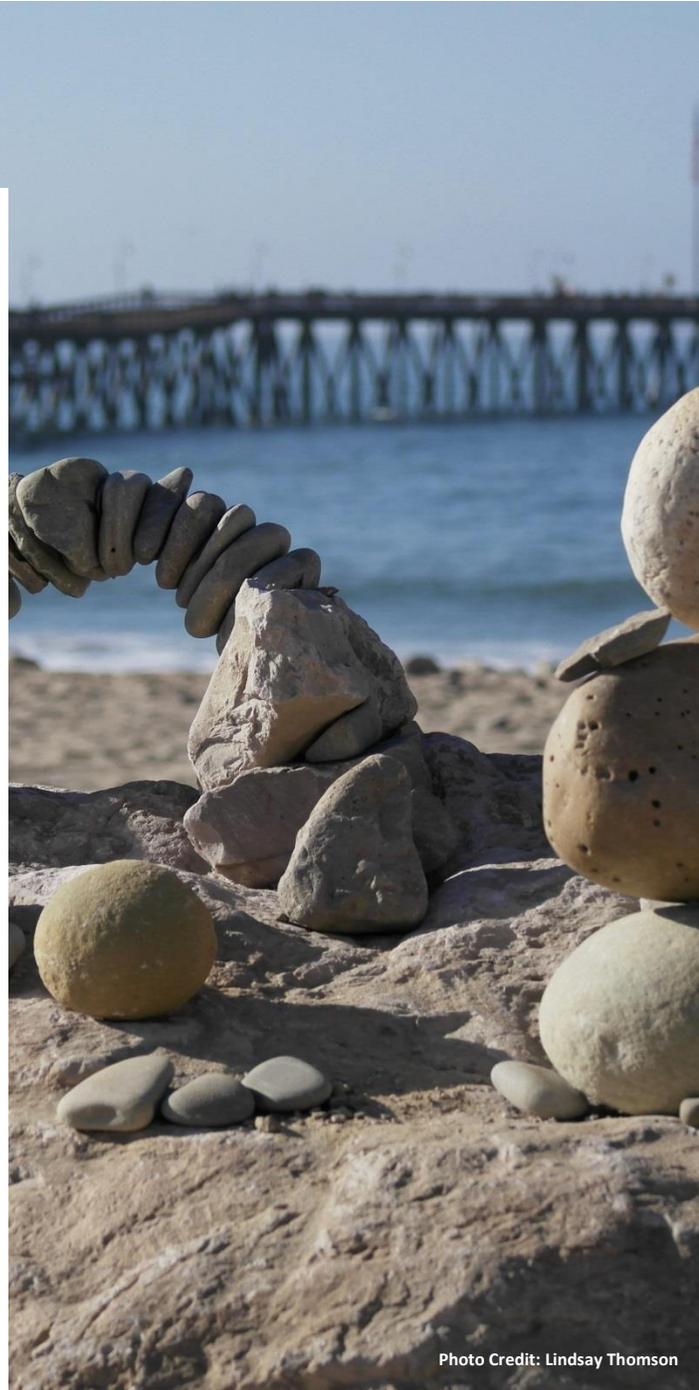


Photo Credit: Lindsay Thomson

Summary of Green Schools Program

Since 1992, the City of Ventura has partnered with Ventura Unified School District (VUSD) and other private schools in Ventura to provide environmentally-focused presentations in all K-12 classrooms. The Green Schools Program (GSP) has always been a free offering aimed at exposing students to ways in which we can all support a healthy and sustainable city. Topics of interest range as vastly as the environment itself, from ocean pollution prevention to composting, renewable resources, recycling, and more.

As students move through grade school, they are exposed to a variety of lessons and activities to help foster their love and excitement for Ventura. With this program, we hope to inspire the next generation of environmental stewards. The City of Ventura's Environmental Sustainability Division offers these free educational presentations to all local K-12 schools, pre-schools, environmental clubs, summer camps, colleges and after-school programs. The City of Ventura also offers free recycle bins, signage, compost bins, vermicompost bins, and rain barrels to help promote sustainability throughout Ventura.

 FREE CLASSROOM PRESENTATIONS						
	Kindergarten	1st Grade	2nd Grade	3rd Grade	4th Grade	5th Grade
Lesson Topics	Healthy Habitat Ocean Protection & Marine Animals	Where Does It Go? 3R's of Sustainability	Where Does It Flow? Watershed & Pollution Prevention	Dr. Rot Composting & Recycling	Renewable or Not? Natural Resources & Conservation	It's a Small World Waste Assessment
NOSS	K-ESS2, K-ESS3, K-LS-1	K-2-ETS1	2-PS1, 2-ESS2, 2-ETS1	3-ESS2, 3-ESS3	4-PS3, 4-ESS3	5-ESS3, 5-LS2, 5-ETS1
Note	Indoor or outdoor	Indoor or outdoor	Outdoor	Indoor	Indoor or outdoor	Outdoor

For more information on field trips and education opportunities visit www.cityofventura.ca.gov/es

In compliance with the Americans with Disabilities Act, special needs can be met by calling 805-658-4725 or the California Relay Service. 

The mission of the Green Schools Program is to educate, inspire, and support public and private schools in the City of Ventura to facilitate a culture of environmental resiliency, health, and safety for our community and future generations.

Program Highlights

In addition to celebrating our **10-year** reunion of the Green School Awards, we are very proud of this successful outreach and education program. During the **2017-2018** school year, the Green Schools Program held presentations in **21** different Schools in Ventura, offering presentations in **297** classrooms for over **6,986** students. **450** recycle bins were distributed throughout the school district in classrooms and offices while **118** tons of food waste was diverted from the landfill through the food scraps composting program. Two schools were awarded an accumulative **\$1,900** for recycling efforts via the Keep California Beautiful Challenge and **1** school earned the Green Ribbon Award. A total of **15** vermicompost bins were delivered to classrooms across VUSD for educational purposes and **1** school began an outdoor learning center with our support.

Partnerships

The City of Ventura Environmental Sustainability's Green Schools Program is working in partnership with Ventura Unified School District, E.J. Harrison & Sons, Agromin, Ventura Water, CSU Channel Islands and other private and public partners to reduce waste within VUSD and educate students about what they can do to keep Ventura healthy and sustainable.

This program wouldn't be nearly as successful as it is today without the curiosity of the students in Ventura, willing teachers, supportive principals, and many other administrators in VUSD that help make this partnership possible. It takes a village to manage successful sustainability programs, but this is, without a doubt, one of the programs that we are most proud of as a division within Public Works.





Green Schools Program

PROGRAM LEADERSHIP

Brandon Kaysen (Program Administrator) earned a bachelor's degree in Economics and Environmental Studies and a master's degree in Environmental Science and Management at the University of California Santa Barbara. After designing and teaching UCSB's first LEED Lab course, Brandon came over to the City of Ventura to oversee the evolution and implementation of the Green Schools Program. Brandon is also a board member of the Central Coast Green Building Council where he advocates for sustainable building design and a healthier indoor environment for all.

Angie Williams (Educational Lead) was educated at Arizona State University where she earned a bachelor's degree in photography. Angie continued with her education to earn a teaching certification with emphasis on middle school science and photography. After gaining experience and teaching first, third, fifth, sixth, and eighth grade science, she relocated to Ventura to be near her family. Angie enjoys paddle boarding, hiking, running, traveling, and photography in her free time. As a concerned environmentalist she volunteers for the Los Padres Forest Watch and Sierra Club in Ventura.

Paul Vaksvik (Dr. Rot) is our infamous lead on composting and all things decomposition (third grade presentation). Paul received his bachelor's degree in Secondary Education and worked for two years as a substitute teacher. Paul was one of the founding members of the Green Schools Program back in 1992 when the City of Ventura was first exploring the possibilities of providing presentations in classrooms. Not only is he a student favorite, he's become quite an idol throughout the city.



Say it with us now, "DE-COMP-OSITION ... Whoop!"

VENTURA UNIFIED SCHOOL DISTRICT

Healthy & Green Schools Committee

VUSD's Healthy & Green Schools Committee is designed to share the work being done across the district in regard to keeping schools in Ventura healthy, safe, and environmentally friendly. Faculty, staff, students, and community members come together to collaborate on projects ranging from gardens, to energy, purchasing, and more. Most importantly, the school district's superintendent, David Creswell, attends every meeting with inspiration and support for the hard work everyone is doing to keep VUSD resilient and sustainable. Much of the success that the Green Schools Program has had over the years can be connected to the support of this integral committee.

All-Principals Meeting

Before school begins every year, principals are required to attend an All-Principals meeting. While there are many logistical items covered during this meeting, the Green Schools Program takes this opportunity to say hello to any new principals and reintroduce ourselves to existing leadership. Any changes in the educational offerings are discussed as well as opportunities for improvement. During this meeting, the green school awards, Keep California Beautiful Challenge, Green Ribbon Schools, and many other programs are brought to attention in effort to improve district participation.

Annual Custodial Meeting

Every year, VUSD has two meetings focused on providing updates and guidance to custodians. Custodians, the unsung heroes of the school district, rarely have an opportunity to express their needs and communicate the kinks in the system that they see on a day-to-day basis at each school. Since the Green Schools Program has an initiative to reduce the amount of landfill-bound waste that VUSD produces and thus increase recycling and composting, we require the cooperation and support of custodians.

Considering this, the Green Schools Program offers a presentation at the custodial meeting before school begins to offer insight, equipment, guidance, and support for custodians. During this meeting, we talk about the recycling program (pros and cons) as well as campus cleanliness, student involvement in sustainability programs, and composting food waste. As a result of these meetings, custodians across the district have received recycle bins of any size as well as dual-cart dollies to help sort trash and recycling during a single route around campus.

CLASSROOM EDUCATION

The **Kindergarten lesson**, “Healthy Habitat”, focuses on discussing how plastic and other debris end up on our beaches and in the ocean. Students understand that what we need to live a healthy and happy life is the same for the plants and animals around us. They gain a sense of responsibility to protect our ocean and help our marine friends. By discussing the importance of keeping our storm drains clean and picking up litter on our beaches and throughout our neighborhoods, students feel empowered to be ambassadors and share their knowledge with our community. This lesson is tailored to the Next Generation Science Standards (NGSS) K-ESS2, K-ESS3, and K-LS-1.

The first-grade lesson, “Where does it go?”, teaches students about the “Three “R’s” of sustainability – with a focus on ‘reduce’. Through an interactive educational experience, students learn about what things are made of, where our waste goes when placed in the proper bin, and why it is important to recycle and compost. Most students are surprised to find out that our waste doesn’t magically disappear. Students gain an understanding of what material belongs in each bin, waste management, recycling, composting, waste reduction strategies, and how to sort our waste during lunch. This lesson is tailored to the NGSS K-2-ETS1.

In the **second-grade lesson**, “Where does it flow?”, a watershed model is used to discuss what a watershed is, where pollution comes from, how it affects the plants and animals in our city, and what we can do to keep our rivers, streams, and oceans clean. Students will see firsthand how easily pollution can end up in the ocean and how to prevent it. Through interaction and discussion, students will also learn about runoff, bioswales, erosion, pesticide management, and many more practices focused on keeping our community and local watershed clean. This lesson is tailored to the NGSS 2-PS1, 2-ESS2, and 2-ETS1.



In the **third-grade lesson**, “Dr. Rot”, our composting guru and champion of all things squirmy, teaches students about composting and recycling. He goes over the magic of composting and how we can use worms to reduce landfill-bound waste and help heal our soil. Dr. Rot gets students excited about vermicomposting and how important it is for our environment. Dr. Rot is absolutely a fan favorite. This lesson is tailored to the NGSS 3-ESS2 and 3-ESS3.

The **fourth-grade lesson**, “Renewable or Not,” students learn about energy conservation and natural resources. While we don't think there's such a thing as "good" or "bad" resources, we do believe that proper management and understanding of these resource types is important for making educated and responsible decisions about our energy sources. In this lesson, students are exposed to different

forms of energy, the effects of energy use on the environment, longevity of energy sources, and how to properly conserve our limited resources. This lesson is tailored to the NGSS 4-PS3 and 4-ESS3.

The **fifth-grade lesson**, “It’s a Small World”, students are taught with a hands-on approach about the unnecessary waste going into the landfill daily. Each fifth-grade class audits their school’s lunch waste to uncover and learn better ways to manage waste. During this activity, students sort through one day’s worth of lunch waste by categorizing and weighing the different types of material in each waste stream. This lesson has resulted in students designing signs for lunch waste bins, videos, and student helpers to help their school understand how to divert food waste from the landfill. This lesson is tailored to the NGSS 5-ESS3, 5-LS2, and 5-ETS1,

In the 2017-2018 school, the Green Schools Program presented to 19 elementary schools and 2 middle schools in Ventura with the assistance of 36 CSUCI student volunteers. Out of those 21 schools, 297 classrooms received a 1-hour presentation. In total, the Green Schools Program reached over **6,986 students**. The total enrollment for VUSD is 17,430 via the California K-12 school database. The Green Schools Program was able to achieve a **40.8%** rate of engagement, an impressive figure that we’re excited to expand on year after year.

RECYCLING PROGRAM

Reducing the amount of waste that VUSD produces is a primary focus area. The Green Schools Program encourages students to ask their parents for reusable containers for lunch and to limit the amount of single-use plastics that they bring to school. The City of Ventura provides reusable utensils, water bottles, and reusable bags to prevent the amount of plastic ending up in the trash at VUSD facilities. Recycling is offered districtwide, with some schools having students collect recyclable items and others having their custodians manage the recycling program. Some schools prefer larger recycle bins collected less frequently, and others want smaller bins that are collected daily. Regardless of the program, the City of Ventura offers free bins, signs, and educational support for students, teachers, staff, and custodians. **865 recycle bins** have been distributed to classrooms, hallways, offices, and cafeterias since 2016. **38 dual-cart dollies** have been distributed within that same timeframe to support custodial staff in collecting trash and recycling as two waste streams with more ease.

VUSD has an agreement with E.J. Harrison & Sons to collect trash, recycling, green waste, and food scraps. The City of Ventura provides recycling assistance with waste audits, bins, signs, recognition, funding for creative source reduction and recycling programs, education in the classroom, and at assemblies. This past year, two of our schools were supported by the Green Schools Program to pursue the Keep California Beautiful Challenge. **EP Foster Elementary won \$1,100** for one second-place and four third-place awards while **ATLAS Elementary won \$800** for two third-place and one third-place awards for their recycling efforts.

AFTER-SCHOOL PROGRAMS

The Green Schools Program partners with The City of Ventura’s Parks, Recreation, and Community Partnerships department to support after school programs. The after-school program is provided to low income students, giving them a safe place to learn and play after school. The Green Schools Program brings supplies and teachers to give students an opportunity to make a small worm bin. Every student gets to take home a worm bin, so they can vermicompost at home under the kitchen sink. The worm bins can support a small family, reducing the amount of organic waste being sent to the landfill. Teaching after school students about composting worms and giving them a bin to take home allows students to take ownership of their food waste in a sustainable way. This partnership also equips students to teach their family and friends about how vermicomposting can reduce the organic waste sent to landfill, thus reducing methane gas and creating a valuable soil additive.

SUMMER CAMPS

For the past four years, the Green Schools Program has partnered with U.C. Hansen Agricultural Research and Extension Center to provide kids with a 4-H Sustainable You! Summer Camp. This is fun, memorable, and interactive week-long camp that focuses on our local environment for kids aged 9-12. Each day centers on a unique environmental theme: air, land, food, energy, or water. Every day through fun, hands-on activities, campers learn how to reduce their footprint and preserve our natural resources. Some activities include harvesting food at the farm, making smoothies with a blender bike, creating solar ovens out of pizza boxes and making vermicompost bins.

The Green Schools Program has partnered with the City of Ventura’s Parks, Recreation, and Community Partnerships Department’s summer camp programs: Camp Ventura and Camp Camino. In these camps, the Green Schools Program presents once a week. Campers do fun, hands on environmental lessons which include: making their own worm bins to take home, making solar pizza box ovens, a water relay race, nature walks, and many more exciting sustainability lessons.

LUNCH FOOD SCRAPS PROGRAM

In 2012, E.J. Harrison & Sons, the City of Ventura and VUSD partnered to implement a food waste collection and composting program as well as a milk carton recycling at E.P. Foster Elementary School. The custodian reported a reduction in landfill waste from forty-four bags to just seven bags daily. This significant savings and large reduction in workload for the custodian has been expanded to all eligible elementary schools. Food scraps from lunch are composted at the Agromin test site in Oxnard.



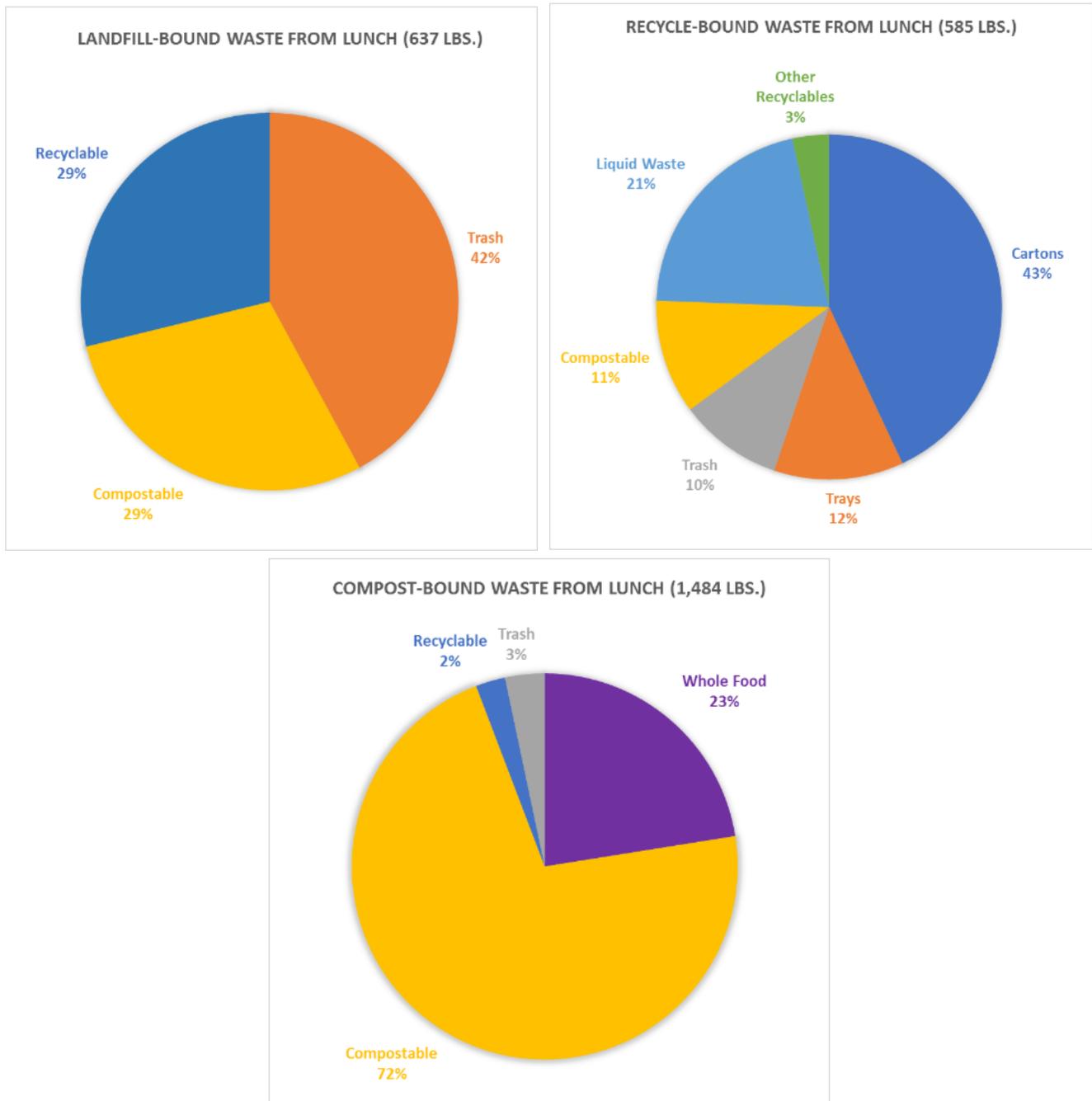
The program's mission is to educate students on how and what can be recycled or composted and the reasons behind why these practices are essential to the sustainability of our community. Food scraps collected and diverted from the landfill avoid methane release while creating nutrient-rich compost material. By the 2017-2018 school year, all elementary schools were enrolled in the food waste collection and composting program. Not only has this reduced the work load of VUSD custodial staff, but it has also reduced their carbon footprint.

The Green Schools Program provides in-classroom and lunchtime assistance to explain the process and value of the program to students and staff. We also assist schools in conducting waste audits to find areas of improvement and help schools institute internal recognition and rewards for a job well done. For food source reduction, we encourage schools to let students have recess before they sit down for lunch. Not only does this strategy help build an appetite, it removes the distraction of recess while eating.

Two videos were developed to help administrators understand the food scraps program and teach students how to sort their tray after they eat. This program is currently being expanded to middle schools, but will likely include a vermicompost program rather than an off-site composting location. Signs, bins, and education is offered for free from the City of Ventura to the school district for food scraps collection. Upon request, the City provides one free worm and/or compost bin to any public or private school within City limits. For students, we developed a [Student Lunch Food Scraps Program Training](#). The video for [Teacher and Administrator Lunch Food Scraps Program](#) is where we highlight best practices.

In addition to sorting bins, signs, and in-classroom education, a waste assessment is performed at each elementary school at least once per year. During the 2017-2018 school year, 5th grade students at 13 of the 18 elementary schools sorted through **2,500 lbs.** of lunch waste. We found that of all VUSD's lunch material is **64%** compostable, **22%** recyclable and **14%** belongs in the trash.

While there is considerable work to be done with the landfill and recycle-bound waste streams, schools saw only **5%** contamination in the food waste bins that we sorted through. This means that of the **1,150 lbs.** of material audited from the compost bin, only **5%** of that material (86 lbs.) belonged in the trash or recycle bin. We hope that continued waste audits will expose students to the need of material management and inspire some to step up into leadership roles to support the kindergarten and first graders with their sorting practices. Below are the cumulative results from our waste audits performed during the 2017-2018 school year. Each pie represents the total material that was sorted by the students, characterized by waste type.



GREEN SCHOOL AWARDS

The 2017 - 2018 school year marks the tenth year of the Green Schools Awards. It has been an honor to support our schools pursue their environmental dreams, supporting their campuses to improve resiliency, and improving the health for everyone at their schools.

The City of Ventura's Environmental Sustainability Division in partnership with Agromin Premium Soil Products and E.J. Harrison & Sons offers this Environmental Leader Award in recognition of Earth Day. In addition to City recognition there is a monetary award to help further fund sustainability projects at schools in the city. All public and private schools within the Ventura City limits that demonstrate exemplary efforts to help our environment are encouraged to apply.

We are happy to announce that Poinsettia Elementary School and Balboa Middle School were our winners for the 2017-2018 Environmental Leadership Award. Students and staff at both schools have demonstrated excellence in sustainability through their composting, campus gardens, and recycling programs.

Green School Award Previous Winners

2016-2017 Green School Award Recipient - [ATLAS Elementary School](#)

2015-2016 Green School Award Recipient - [Buena High School](#)

2014-2015 Green School Award Recipient - [Lincoln Elementary School](#)

2013-2014 Green School Award Recipient - [EP Foster Elementary School](#)

2012-2013 Green School Award Recipient - [Ventura Charter School](#)

2011-2012 Green School Award Recipient - [Balboa Middle School](#)

2010-2011 Green School Award Recipient - [Portola Elementary School](#)

2009-2010 Green School Award Recipient - [Lincoln Elementary School](#)

2008-2009 Green School Award Recipient - [Saticoy Elementary School](#)

Moving Forward

The health and wellness of our city is rooted in the sustainability of our built and natural environment. It has become more and more clear that students play a major role in the long-term resiliency and sustainability of our City. While we are all learning and trying to make environmentally conscious decisions about our lives, the next generation is left with a bit of a mess to clean up. Since our future citizens are so important to us, our Green Schools Program is a point of pride for the city. Below are a few programs highlighting how we hope to improve this program next year.

GREEN RIBBON SCHOOLS

The US Department of Education's Green Ribbon Schools recognition program honors schools, districts and other educational institutions for excellence in resource efficiency, health and wellness, and environment and sustainability education. California K-12 public and private schools are eligible to apply for this distinction starting in September with applications due in January. VUSD has two distinguished Green Ribbon Schools – Will Rogers Elementary and Sunset Elementary schools. They are emblematic of our effort to promote sustainability in our schools. The Green Schools Program would love to support any other schools in Ventura to pursue this honors program.

KEEP CALIFORNIA BEAUTIFUL CHALLENGE

The Environmental Sustainability Division's Green Schools Program coordinates with the Keep California Beautiful Challenge to run recycling competitions. The schools who participate in this challenge must organize, inspire, and motivate their students to collect, weigh, and take pictures of their recycling efforts. The students collect data to document how much they are recycling. This was the first year any schools in VUSD entered the competition and both schools that entered, ATLAS Elementary and EP Foster Elementary schools won cash prizes. Our goal is to have at least 5 schools participate in the 2018 – 2019 school year. The Green Schools Program coaches the schools throughout the process, manages their data, uploads photo evidence, and facilitates conversation with the Keep California Beautiful staff.

ASSEMBLIES AND FIELD TRIPS

In the 2018 – 2019 school year, the Green Schools Program will offer field trips to the Toland Landfill, Agromin Composting Facility, and Ventura Green Businesses. Please reach out to Brandon Kaysen for additional information and logistics for these educational adventures.

CONTACT US

Brandon Kaysen

bkaysen@cityofventura.ca.gov

(805)652-4593

Angie Williams

awilliams@cityofventura.ca.gov

(805) 652-4525

City of Ventura Environmental Sustainability

336 Sanjon Rd.

P.O. Box 99

Ventura, CA 93002

ADDITIONAL RESOURCES

- Green Schools Program: <https://www.cityofventura.ca.gov/1206/Green-Schools-Program>
- Green School Award: <https://www.cityofventura.ca.gov/1234/Green-School-Award>
- The Sustainable You! Summer Camp: <http://ucanr.edu/blogs/hansen/index.cfm>.
- Balboa Middle School Waste Audit: https://www.youtube.com/watch?v=r0_DVfrDkdI&t=1s