

2013-14 Care for Our Earth Grants

For more information, contact Steven Keithley, Director of Teacher Programs and Support at the Santa Barbara County Education Office, at skeithley@sbceo.org or 964-4710, ext. 5281.

Santa Maria Area

“Apple Trees for Air”

Kelly Davis, Pioneer Valley High School

Santa Maria Joint Union High School District

Students read Laurie Halse Anderson’s novel, “Speak,” in which trees symbolize the positive and negative events in the narrator’s life. By reading several nonfiction articles that accompany the novel unit, students learn about trees and their ability to reduce air pollution. As an accompanying project, students bring in tree seeds, such as those found in apples, to plant in the classroom garden. Once the seeds have germinated, students take them home to plant and nurture into young trees. Students are encouraged to ask for permission to plant their trees in the community, such as at parks and churches.

“California Native Plant Gardens/Arboretum”

Laura Baines, Pioneer Valley High School

Santa Maria Joint Union High School District

Laura Baines is creating an educational, on-campus arboretum of California native plants for students and visitors to enjoy, complete with species identification and natural history information. She and her students build the arboretum and educate visitors on California native plants, vegetation zones, life cycles, biomes, and native soil replenishment.

“Composting! The Solution to Sustainable Soil and Water”

Judith Morris, Arellanes Junior High

Santa Maria-Bonita School District

Students are introduced to composting as a way to conserve water resources. After participating in several activities and lessons regarding composting and water conservation, students create posters that reflect the message that composting is a solution to sustainable water and soil. The posters are entered in a national poster competition where students can win a savings bond if their poster wins.

“Electrifying Change”

Michael Zarling, Taylor Elementary School

Santa Maria-Bonita School District

Fourth-grade students determine the number of LED vs. fluorescent bulbs their households are using. As bulbs burn out, students encourage their parents to use LED lights instead of fluorescent bulbs. A school-wide competition is carried out to see which grade level can have the largest increase in usage of energy-saving bulbs.

“Fesler Ecology Club — Oso Flaco Water Quality”

Michael Schaefer, Fesler Junior High School

Santa Maria-Bonita School District

Fesler Ecology Club students take a field trip to the Oso Flaco Preserve where they learn about the water cycle and the importance of wetlands and riparian environments. They look at the way water is used in the adjacent farmlands, and how nitrogen fertilizers can affect the oxygen levels in the coastal wetland habitat. The trip is used as inspiration for ideas to conserve and improve the water quality at Oso Flaco and in the greater coastal region.

“For the Love of Water”

**Stacey Lovell, Orcutt Academy K-8
Orcutt Union School District**

After visiting Lake Cachuma to learn about our domestic water supply, students look for water waste at school and at home and identify ways to conserve this precious shared resource.

“Joe Nightingale’s Green Team”

**Lisa Savaso, Joe Nightingale Elementary School
Orcutt Union School District**

Sixth-grade students are assigned a classroom or office on campus to be in charge of collecting weekly recyclable materials from. They communicate with teachers and administrators to make sure their recycling needs are met. Grant funds are used to purchase post-consumer recycled classroom materials and supplies to help students see how their efforts can come full circle.

“Lights Out – Closing Down My Class”

**Richard Rowe, Taylor Elementary School
Santa Maria-Bonita School District**

Sixth-grade students, grouped in teams of four, produce grade-level presentations to educate students on how to reduce energy consumption at school and at home. Pamphlets are produced and sent home with each student to remind them of strategies we can all implement to reduce electric and gas consumption. Additional students are grouped as “Energy Ambassadors,” reminding and assisting teachers to shut down computers and electrical devices every evening.

“Making Connections”

**Deanne Rosing, Catherine Ulrich, Home School Program
Santa Maria Joint Union High School District**

Home school students learn how to use public transportation, reading and deciphering bus and train schedules. They then lead a trip from Guadalupe to Santa Barbara using the train and Santa Barbara MTD system as transportation. The goal is to reduce anxiety associated with the use of public transportation and increase ridership, thereby reducing the number of vehicles on the road, and therefore decreasing air pollution.

“Mission Possible”

**Andrea Hernandez, Liberty Elementary School
Santa Maria-Bonita School District**

Fourth-grade students make it their mission to educate the school community on the importance of conserving water and saving the natural resources of our planet. Students set up a booth at lunch to discuss the importance of saving water at school and home, and offer suggestions for what students can do to help.

“Off The Bus and On The Trail”

**Cuneyt Yolar, Taylor Elementary School
Santa Maria-Bonita School District School District**

Sixth-grade students campaign to encourage their peers to ride their bikes to school. Maps that include safe trails near the school campus are passed out, and presentations are made to generate awareness and interest. Students who choose to ride their bikes instead of taking the school bus or personal vehicle are rewarded with special eco-friendly prizes.

“Oh No: Ozone!”

**Riccardo Magni, Pioneer Valley High School
Santa Maria Joint Union High School District**

Students use an Aeroqual air meter to monitor ground level ozone in the school parking lot. They compare levels on hot days, cold days, busy days, and empty days. The data is compiled and recommendations are made based on the findings.

“Pedal Power”

**Charlotte Belyea, Tommie Kunst Junior High School
Santa Maria-Bonita School District**

Students participate in the youth safety program Pedal Power, which teaches students bicycle safety, handling skills, traffic skills, bicycle maintenance, and route mapping. Graduates of the program get to keep their donated, refurbished bicycles, provided by Bici-Centro, the Santa Barbara Bicycle Coalition. Students become safe, competent, and knowledgeable cyclists.

“Pedal Power: Traffic Solutions”

**Julia Pustizzi, Fesler Junior High School
Santa Maria-Bonita School District**

Students participate in the Pedal Power program offered through the Santa Barbara County Bicycle Coalition. Students learn how to ride safely and effectively on the road. Graduates earn a bicycle, helmet, lock, light, and a tire-patch kit. Students become equipped with the skills, knowledge, and abilities to safely bike to school and around the community.

“PVHS Earth Day Expo and Celebration”

**Erika Satkoski, Pioneer Valley High School
Santa Maria Joint Union High School District**

Pioneer Valley High School hosts an annual Earth Day Expo and Celebration the week before Earth Day. ASB students emcee the rally with environmental information, eco-related games, and eco-prizes. Environmental vendors from around the county are invited to set up booths and talk with the school community about environmental issues, solutions, and services. Students participate in the Grocery Bag Project, where they decorate paper bags from local grocery stores with Earth Day messages. The decorated bags are sent back to each store for use on Earth Day. The goal is to remind customers of the importance of saving our Earth’s natural and precious resources.

“Recycling Ambassadors”

**Aimey Adams, Carol Gillespie, Tommie Kunst Junior High
Santa Maria-Bonita School District**

Students become “Recycling Ambassadors” as they provide education to other students and school staff on recyclable products and promote paper and plastic recycling on campus. Money earned from the recycling drive will be used to pay for assemblies that promote environmental awareness.

“Recycling to Save Lives”

**Jan Sprague, Mary Buren Elementary School
Guadalupe Union School District**

Fifth-grade students in the Global Citizens Club conduct a recycling drive on campus where they collect and recycle plastic water bottles. The proceeds from the drive are used to purchase mosquito nets for families in Africa who are vulnerable to mosquito-borne malaria.

“Save Water”

**Mindy Amaral, Miller Elementary School
Santa Maria-Bonita School District**

Third-grade students visit the local wastewater treatment plant and learn about water conservation and the treatment process for wastewater. They then participate in a science project that deals with water conservation.

“The Green and Economical Ride to Independence”

**Glenn Goldin, Santa Maria High School
Santa Maria Joint Union High School District**

Students in the Transitional/Vocational Program use the local public transportation provider, SMAT, to access work and volunteer sites, and other transitional services in the community. Students calculate and graph the difference between estimated cost and consumption of fuel for private versus public transportation over a 30-day period.

“Water Treatment”

**Chad Hartford, Benjamin Foxen School
Blochman Union School District**

Students get a firsthand view of the physical, chemical, and biological processes involving sewage remediation as they build their own water treatment plant, complete with filtration, aeration, and bioremediation.

“We Are Water Reducers”

**Christine Jimenez, Tunnell Elementary School
Santa Maria-Bonita School District**

Third-grade students conduct a school-wide campaign to remind the school campus about the importance of saving water and how they can save water at school and at home.

“Where I live”

**Cheryl Spence, Benjamin Foxen School
Blochman Union School District**

Kindergarten students outline where there is energy and water use in their homes. The drawings are a discussion starter as to what young students can do to help save costs for their parents while at the same time saving precious natural resources.

Lompoc Area

“Hapgood Conserves and Cares”

**Cindy Spangler, Arthur Hapgood Elementary School
Lompoc Unified School District**

Special Education students teach their peers to conserve energy by adding stickers to light switches and electrical outlets, reminding students and teachers to shut off the lights and turn off computers and other electrical devices when not in use. They also create signs to highlight the recycling bins around campus in an effort to promote the recycling of plastic, paper, and other recyclable materials instead of trashing them.

“Student Council City of Lompoc Field Trip”

**Marna Ford, Miguelito Elementary School
Lompoc Unified School District**

Sixth-graders in the Student Council at Miguelito School visit the City of Lompoc and meet with the departments of water and electricity to learn how to conserve water and reduce electricity use on campus.

Students then present their findings to the students and faculty at Miguelito School, and work to implement changes on campus regarding water and energy conservation.

“Where Does Our Water Go?”

Melinda Darway, Kristin Anderson, Maple High School

Lompoc Unified School District

Students research where their water comes from, where it goes, and what can be done to conserve it. They take a field trip to the local water facility to take a tour and learn how they, as individuals, and as a school, can reduce water consumption. Their findings will support students as they implement a school-wide water conservation project where they provide education to the school population on water consumption and conservation.

“Water is the Staple of Life”

Matt Makowetski, Maple High School

Lompoc Unified School District

Students examine water production and reclamation in the Lompoc Valley, including production, filtration, and waste management. They also visit neighboring localities to investigate their water facilities. Students produce public service announcements to share what they have learned with the public.

Santa Barbara Area

“Catching Water”

Liz Larsen, Hollister Elementary School

Goleta Union School District

Kindergarten students install guttering and rain barrels around campus to collect water run-off from the roofs of various buildings. The installation is strategic as students are tasked with determining the best areas to catch runoff. The collected water is used to water plants around campus.

“Disposable to Durable: A Watershed Moment”

Lisa Lisle, Brandon Elementary School

Goleta Union School District

Fifth-grade students participate in Explore Ecology’s “Student Ocean Stewards” program where they learn about watersheds and how litter makes its way to the ocean. As part of the program, students work on a project that focuses on reducing marine debris by educating their peers and local community to replace disposable plastic products with durable items. Students collaborate to develop an educational website that can be shared with peers, the community, and beyond. The website includes graphs and tables of litter pick-up and progress, views of the local watershed, persuasive essays and texts to promote durable water bottles and waste-free lunch packing, and embedded/linked student-created films on various aspects of the project.

“DPHS Permaculture Project”

Kevin Gleason, Dos Pueblos High School

Santa Barbara Unified School District

Permaculture is a design system that creates human systems that mimic the beauty, efficiency, and sustainability found in nature’s patterns. Permaculture students create and maintain a productive “Food Forest” made up of fruit trees and native plants. The fruits and herbs from the garden are free for any student to pick and snack on.

“Food Grows Where Water Flows”

**John Avila, Carpinteria High School
Carpinteria Unified School District**

Students build a hydroponic system using irrigation lines. The system uses recycled water to nourish student-planted native plants. The plants are sold at the local farmers market, where students host a booth and educate the public on water conservation.

“LivingWise”

**Beth Scott, Monte Vista Elementary School
Hope School District**

Sixth-grade students participate in the LivingWise Program where they learn about energy efficiency and conservation. As part of the program, students receive a kit that includes various materials to use at home to improve energy efficiency and reduce water consumption and waste.

“Make It Right! Turn Out The Light!”

**Susan Zink, Hollister Elementary School
Goleta Union School District**

In an effort to make families more aware of wasted energy, first-grade students record how many times they turn off the lights in empty rooms at home. The results are tallied and monthly findings are presented at a school assembly.

“Open Streets/Calle Vivas!”

**Lee Ann Knodel, Santa Barbara High School
SBCEO Regional Occupational Program**

Students of the Dons Net Café join with BiciCentro to learn bike repair, street safety, and provide bikes to children who do not have access to them. Additionally, students are involved with planning the Open Streets/Calles Vivas! event in Santa Barbara. At the event, students act as traffic guides and event ambassadors, working to promote bicycle ridership in Santa Barbara County.

“Re-Usable Water Bottle Drive”

**Lourdes Torres, Hollister Elementary School
Goleta Union School District**

Second-grade students track how many water bottles are saved through the installation of a new water filter at Hollister School. The results are broadcast through the school announcements, as students encourage their peers to bring in re-usable water bottles and make use of the new filter.

“Save Water for Life”

**Maria Licón, Peabody Charter Elementary School
Santa Barbara Unified School District**

Second-grade students learn about the different habitats and animal life found at Lake Cachuma, and about the importance of water and that all living things need this resource to survive. Students take a field trip to Lake Cachuma and hear from a presenter from the Watershed Resource Center who talks about how the water is transported from Lake Cachuma to our homes, and how it is treated for use. The lesson also stresses the importance of ways students can conserve water and become Water Wise. Students also take a trip to the Watershed Resource Center at Hendry’s Beach where they learn about our watershed and conduct a beach cleanup.

“Tell the World How We CAN Save It”

**John Dent, Dos Pueblos High School
Santa Barbara Unified School District**

Students create videos that promote water conservation, record traffic patterns, and promote energy-usage awareness. The videos will air on the class’ daily news show. Cameras will record drop-off and pick-up

times at Dos Pueblos to allow the traffic team to analyze the traffic patterns and propose ways to improve traffic flow and increase carpooling and shared transportation. Students will also conduct and record research on current energy usage and water consumption on campus and identify ways to make improvements.

“The 5-Minute Shower Challenge”

Andrea Lauderdale, David Nelson, Vieja Valley Elementary School

Hope School District

After learning about the water cycle and how water is a necessary part of our existence, first-graders and their families conduct “The 5-Minute Shower Challenge” where they track the time they spend in the shower along with the amount of water they use. They then adjust their shower time to five minutes or less and re-calculate the amount of water they use with the shorter shower times. Cutting a shower down from 10 to 5 minutes can save an average of 40 gallons of water per shower. Students discuss the implications of water consumption and conservation.

“Water Wise”

Kim Baron, Washington Elementary School

Santa Barbara Unified School District

Third-grade students learn about the fresh water supply on Earth, specifically how much fresh water is available. The class discusses how water is used in our daily lives and how that would change if we had to carry or travel to get our water. Students complete a three-day water-use tally to determine how much water they use at home, school, and out in public. The data is compiled to determine the amount of water used by each student and the class as a whole. The class discusses how much of that water is wasted. Students use their newfound knowledge to create posters that are hung around school to encourage other students and school staff to reduce their water consumption and waste.

“Water Wise and Monte Vista”

Tairy Birkley, Monte Vista Elementary School

Hope School District

Second- and sixth-graders buddy up to educate students about ways to conserve water and the importance of having clean water every day. Students create posters, conduct classroom presentations, and create segments for Monte Vista’s news show, Monte Vista News. Students also create Water Wise bracelets and add stickers to re-usable water bottles to promote the occurrence of students bringing their reusable bottles to school. Grant funds support the installation of a water bottle refill station on the school campus.

Santa Ynez Valley Area

“Student Energy Savers”

Candis Cuevas, Olive Grove Charter School, K-8

Los Olivos School District

Students log the energy (coal, natural gas, petroleum, propane, and electricity) they use over a three-day period. The findings are discussed and students determine ways they can reduce their energy consumption. Students are assigned the role of “energy saver” at home, where each week they work on reducing the energy that is being used at their homes. Students track their household’s weekly energy consumption and receive “energy bucks” if they were able to successfully reduce consumption at the end of the week. The energy bucks can be turned in for energy-saving compatible prizes.