

**GREEN SCHOOLS COMMITTEE
TENTH ANNUAL REPORT
MAY 9, 2018**

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2017-18 GREEN SCHOOLS COMMITTEE ATTENDEES/REPORTS

Community Experts & Parents

Molly Behn	Coastal Watershed Council
William Goss	Project Pollinate
Bill Henry	Groundswell Coastal Ecology
Dan Lazarus	Santa Cruz County Parks, Quail Hollow Park
Jeremy Lin	Rancho del Oso State Park Docent
Jessica Martinez-McKinny	Santa Cruz City Water Department
Leslie O'Malley	City of Santa Cruz Waste Reduction
Sheila Peck	Green Business Program
Amity Sandage	SC County Office of Education, CREEC Network
Becky Steinbruner	AFE Parent
Ken Wagman	Gavilan College Instructor
Tiffany Wise-West	City of Santa Cruz Climate Action Program

District Staff

Patrick Gaffney	Assistant Superintendent, Business Services
Catherine Meyer-Johnson	Administrative Assistant to the Committee
Trevor Miller	Director of Maintenance, Operations & Transportation
Mary Anne Robb	Curriculum, Intervention & Assessment Dept. Co-Director

Classified and Teachers

Stu Branoff	Bay View teacher
Joanne Brown	AFE consulting teacher and parent
Sally Corbin	Mission Hill Middle School teacher
Keresha Durham	Greater Santa Cruz Federation of Teachers rep, AFE teacher
Elnora Lewis	Harbor High Special Day Class teacher
Heather Murphy	Curriculum Dept. Science Coach

SCCS School Board

Jeremy Shonick	SCCS Trustee
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Students

Ahmad Aziz	Harbor High SDC Recycle Club
Levi Glatt	Cabrillo College, former AFE student
Gray Jameson	AFE Student
Bria Steinbruner	AFE Student

EXECUTIVE SUMMARY

The committee has met three times in 2017-18. The highlights include:

- Students played an important role this year, bringing vitality and ideas to the committee for consideration. Alternative Family Education students Levi Glatt, Gray Jameson and Bria Steinbruner shared their projects. Harbor High SDC Recycle Club President Ahmad Aziz spoke about his club's activities on campus. Thanks to AFE teacher Joanne Brown, Harbor High teacher Elnora Lewis and Mission Hill Middle School teacher Sallie Corbin for encouraging SCCS students to participate in environmental endeavors.
- The DROPS (Drought Response Outreach Program for Schools) project to increase rainwater catchment and reduce runoff at Bay View was delayed due to construction industry cost increases while the project was being planned. It is currently being re-bid in hopes of better pricing. Staff will continue to work with UCSC IDEASS students to coordinate this project. The Bay View Elementary Rainwater Catchment project team is value-engineering the project to reduce the scope of work required by outside vendors and to take on more of the work by volunteers and students.
- Science Coach Heather Murphy has been working with Amity Sandage of the COE to connect schools with outside resources to support Next Generation Science Standards topics and goals. They are putting together an eight day paid summer workshop for teachers and educators which will be available for two teachers from each SCCS school and ten teachers from feeder schools.
- Bay View, for the sixth year in a row, participated in the Green Apple Day of service sponsored by the US Green Building Council on 9/23/17. Parents, teachers, staff, and students participated in doing garden work. The District's Board recently approved a mural to be painted on Bay View's Mission Street sound wall, which will depict marine life and concerns about plastic pollutions in the ocean. This project is being jointly funded by a City of Santa Cruz mural grant, the artist Taylor Reinhold and the Clean Oceans Initiative and fundraising.
- The fourth or fifth grade classes went through the Watershed Education Program to the San Lorenzo River and to Loch Lomond with bus transportation funded by the City of Santa Cruz. This partnership made possible a program which positively affects our students.
- Partnered with Ecology Action, and are co-hosting the 2017-18 Bike/Walk to School Days. Santa Cruz City Schools participates in the fall and in the spring events.
- Monarch students participated in the Earth Day Class Project Challenge on 4/21/18 by creating an exhibit to raise awareness of the impact of plastic straws on wildlife and the environment. Their research showed that 500 million plastic straws are used daily world-wide, enough to circle the globe 2 ½ times per day!
- SCCS students participated in the annual Teen Fashion Show, featuring recycled materials, and in the Santa Cruz Recycles poster contest, both sponsored by SC City Public Works.

What follows is a report on specific activities of the Committee during the 2017-18 school year.

STUDENT PROJECTS

Alternative Family Education Student Bria Steinbruner attended all the Green Schools meetings this year to share her project, a pathway to be constructed at Branciforte Small Schools, incorporating native plant landscaping and plaques displaying historical information on the Native Americans of Villa Branciforte. This is a further evolution of the heritage rose monument project she did last summer at Branciforte Small Schools. Gray Jameson of AFE took photos and measurements, then drafted renderings of the proposed project. Donations of landscaping materials were received from Central Home Supply. Levi Glatt, a graduate of AFE, is consulting on plant selection. Due to bond modernization projects to be initiated in the near future, the garden project must wait a year to move forward. AFE Student Gray Jameson shared his mass transit video which portrayed a future high speed rail system running from the Old Sash Mill to 41st Avenue, parallel to Highway 17. He used the City Skylines game platform, imported a Santa Cruz map, and laid out buildings. His video showed people entering and exiting the train at stops as it ran along its tracks.

Former AFE student Levi shared his self-published book, Medicinal Herbs of Santa Cruz County, which contains illustrations done by Levi of more than thirty medicinal herbs found locally and in the Greater California Bay Area, details of each plant's usage, methods of preparation, warnings, folklore and history of use, locations where plants can be found in Santa Cruz County and the author's favorite herbal recipes. Levi has used proceeds of sales to pay the cost of herbal remedies which he makes available to those who may lack access to health care.

All three AFE students were encouraged to participate in the Green Schools Committee this year by AFE Teacher Joanne Brown.

Ahmad Aziz, Harbor High SDC Recycle Club President, spoke about his efforts since his sophomore year to raise funds for the Club's scholarship. Ahmad collected cans and bottles from family and friends, as well as on campus. Teacher Elnora Lewis said that many Harbor students recycle, but the Club is just for SDC students. It teaches them a pathway to earn money, and to contribute to campus and community beautification.

Sallie Corbin, an 8th grade teacher from Mission Hill Middle schools spoke about her work with MH students on reducing use of plastic products which end up in the great Pacific Gyre. They met with the Director of Food Services to explore eliminating the plastic straws that come with cafeteria juice boxes. There is a continuing effort to eliminate the use of single serve plastics. A different class goes out daily to pick up trash on school grounds, to see if this will translate to less litter being generated. Morning announcement videos and Instagram posts have also been used. Sallie said that to be successful, a team effort should include Grades 6-8 students, perhaps through a three year plastic unit curriculum, coordinated with other teachers.

DISTRICT OPERATIONS

The first phase of projects funded by Bond Measures A & B was initiated this year. The master plans for the sites are being fine-tuned and prioritized and project timelines developed. The first bond project, re-roofing at Bay View, is nearly complete. Plans for replacement of the swimming pools at Harbor and Soquel High Schools are progressing. For the of installation of an artificial athletic field and track at Harbor High, experts have been engaged to assist with evaluating any potential negative effects in connection with the Arana Creek flood plain. Mission Hill Middle School's entry and front yard are to be renovated to create an area behind the sidewalk where students waiting for pick-up can sit. A ramp is to be added to the main entrance at Mission Hill, to direct the flow of foot traffic and to improve security. At Branciforte Small Schools the existing parking lot will be redesigned to include an exit road along the north side of the school to Branciforte Avenue. This will improve the traffic flow at the school.

DISTRICT CONSERVATION PROJECTS

The District is continuing efforts to conserve water with the Harbor High artificial turf track and field renovation. This project is funded by Measure A bond funds. Now all three District comprehensive high schools and middle schools have artificial turf fields. Grass has become less of an alternative because high usage by students and outside groups damages athletic fields every year, necessitating expensive rehabilitation work without enough time for fields to recover, and because of the water required to maintain them.

The Prop 39 (Clean Energy Jobs Act) projects this year have been continuations of previous projects, including installation of LED lighting at Harbor High and replacement of some of the HVAC units at Delaveaga Elementary. These projects were coordinated by Climatec.

TRANSPORTATION

In partnership with the City of Santa Cruz and Ecology Action, the District encourages students and staff to participate in "Bike to School" day, held in the fall and spring. Breakfast treats and other goodies are given to all who participate.

We are examining proposals for grants to fund electrical school buses. We will know more in August 2018 as the program unfolds and eligibility guidelines are formulated.

CURRICULUM

Heather Murphy, Science Coach for SCCS, shared her efforts to ensure that Grades K-6 field trips provide fun activities which encourage understanding of scientific concepts across grades. There are plans to add more watershed projects and related curriculum strands, and to work during the summer with teachers and providers. A professional development workshop is being planned for 6/11-6/15/18 to bring together teachers and community resource agencies to develop lesson sequences by grade. The Educator Effectiveness Grant from the California Dept. of Education will pay stipends to 20 teachers (two from each SCCS school) and 10 teachers from feeder Districts to this professional development opportunity. Science, history and careers will be woven together to implement the new NGSS standards. The core principle is to connect students to their environment. John Muir Laws, an artist, naturalist, author, and educator, will share his science illustration concepts. Several Green Schools meeting attendees from State and County Parks, City agencies and conservation groups will participate. SCCS is currently working with BaySci, a division of the Lawrence Hall of Science at UC Berkely, to develop a Master Curriculum Plan to incorporate environmental literacy, environmental principals and concepts. Joanne Brown, lead science teacher at Alternative Family Education, has piloted this effort through her work with John Laws to develop curriculum for her students.

Amity Sandage, the Regional Coordinator for the State's Educational Network distributed a brochure that outlines program offerings by outside agencies, organized by grades. A more complete list is available online.

PARTNERSHIPS WITH LOCAL AGENCIES AND ENVIRONMENTAL GROUPS

The Santa Cruz City Water Department has continued their generous partnership with SCCS for the elementary grades watershed field trips. In 2017 over 300 students visited the San Lorenzo River and the Loch Lomond reservoir, including students from Gault, Delaveaga, Bay View and Westlake. In 2018, 5th and 6th grade students will participate, possibly in the fall. School assemblies introduce concepts and info on the field trips, and classroom materials are available which depict the source of water and how it is treated. The topographic model of Loch Lomond and the surrounding area has been replaced. Activities have replaced the previous long lecture. Students learn how to read the map, and carry out experiments on water run-off, comparing turbidity and how trash ends up in the reservoir. To make the program sustainable for the District, the City of Santa Cruz Water department provides the funding for the buses, a significant cost of the project.

The City of Santa Cruz School Recycling and Waste Reduction program continues to offer 3rd -5th grade students trips to the City Resource Recovery Facility, with the City providing transportation. They have placed recycling containers on campuses and visited schools to make in-class presentations on waste reduction, recycling and composting. The Santa Cruz Recycles poster contest, the Earth Day Class Project Challenge and the Earth Day Teen Recycled Fashion Show are other opportunities for students to participate in “Reduce, Reuse and Recycle.”

The City also coordinates the Green Certification Program. Bay View was recently recertified as a green school and Mission Hill Middle School is close to completion for certification. The City checklist for certification focuses on energy awareness, recycling and lightening chemical use. The District’s Food Services Department has been approached to discuss ways to reduce the amount of trash generated and about use of recyclable tableware, packaging and serving supplies. At present, not much from the school lunch program can be recycled, as it must be compostable.

The Committee heard from the Santa Cruz Climate Action Program, which aims to help reduce emissions and to prepare for climate change. Projected danger zones have been mapped, and there is an ongoing effort to explore through community forums how citizens want Santa Cruz managed and social vulnerability as it relates to climate danger zones. This program is seeking a way to integrate these ideas into the classroom, perhaps through a virtual reality project to explore what things might look like, to educate and elicit feedback.

Groundswell Coastal Ecology has worked with students at Gault Elementary School for the past five years in the Ocean Guardians Program, on plantings at Seabright Beach to restore the native coastal habitat. Their efforts were integrated into the Lifelab program. Students start in the lab, visit the coast to observe, return to check on restoration. Metrics include observations of insects and birds.

The Coastal Watershed Council provided an after-school opportunity for District 2nd Graders to learn how we rely on and use the San Lorenzo River, home to steelhead trout. In a 24-week program, students planned, investigated and created models.

The Green Schools Committee heard from Project Pollinate, an organization devoted to protection of the ecosystem through education, research and the development of sustainable solutions in a variety of areas, such as pesticide reform and the establishment of habitats for pollinators. A specific focus of the group is on eliminating the use of toxic pesticides, especially Round-up, near schools and other city venues.

Opportunities for student field trips were offered by representatives of the Rancho del Oso, a California State Park, and Quail Hollow Park, a Santa Cruz County Park. Programs may be customized according to a teacher’s curriculum.

PLANS FOR THE FUTURE

*** Continue to reduce the District’s carbon footprint by including environmental choices as the District’s modernization projects are actualized over the coming years.

***Continue the Student Subcommittee and encourage and support students in their projects.

***Keep working with the city and county governments, the COE, the City Museum of Natural History, Ecology Action, the US Green Building Council, UCSC and other interested organizations that want to contribute to the District.

***Keep the flexibility of the committee that enables local organizations to participate and make contributions to the District.