

# Alameda Unified School District: Toward A Vision of Environmental Literacy

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# So Why is Environmental Literacy Such a Big Deal in Alameda?

- ▶ As an island community, Alameda is at sea level, posing challenges to us as we work toward sustainable operations as a district
- ▶ A grassroots effort among a few committed teachers and parents started the whole movement for us almost a decade ago in 2009
- ▶ We started with **campus** greening efforts (e.g., school gardens and waste diversion efforts), and those pilots then went districtwide
- ▶ From there we pushed for increasing focus on our **curriculum** by partnering with BaySci in 2012 and then with ChangeScale in 2016 to increase time spent focusing on science instruction
- ▶ Then students, teachers, and **community** members pushed our thinking further as they advocated for solar initiatives and other ways we could make our district even greener and even more environmentally literate yet, leading us to partner with others
- ▶ Ultimately we have worked from making small changes in schools and classrooms to making bigger changes and commitments as a district writ large, institutionalizing efforts with our Board

# Alameda Green Schools Challenge

- ▶ Created in 2009 at 5 pilot schools (Bay Farm, Edison, Otis, Paden, and Chipman)
- ▶ Obtained multi-year grant for containers and equipment
- ▶ Full implementation districtwide in 2012
- ▶ Achieved 65% diversion in 3 years
- ▶ Golden Bell Award in 2014
- ▶ Supported Green Ribbon School applications for Bay Farm and ASTI

## 90% Solution Project

- ▶ Goal to reach 90% diversion by 2020
- ▶ Designated a StopWaste “Priority Partner” district
- ▶ Obtained a multi-year grant for Green Program Facilitator

# Mini-Bin Project

- ▶ Mini-bins in schools and District Office
- ▶ Rolling out to all elementary and middle schools in 2017-18



# Right-Sizing Project

- ▶ Increased recycling and composting
- ▶ Reduced trash volumes
- ▶ Recommended changes resulted in 70% diversion district-wide in 2016



# Plastic Waste Reduction

- ▶ Eliminated “spork” packets
- ▶ Eliminated straws
- ▶ Reduced single-use condiments



# Food Waste Reduction

- ▶ Formalizing “Food Share” tables
- ▶ Donating surplus food



School	2008 Diversion Rate	2017 Diversion Rate	Landfill Pounds per Student per Day
Academy	38%	72%	0.9
ACLC/Nea	50%	63%	0.5
Alameda High	36%	60%	0.5
Bay Farm	20%	76%	0.3
Earhart	65%	60%	0.8
Edison	50%	80%	0.4
Encinal	50%	65%	0.6
Franklin	50%	62%	0.5
Haight	67%	80%	0.5
Island/WCDC	40%	50%	1.2
Lincoln	31%	67%	0.6
Lum	43%	71%	0.5
Maya Lin	67%	77%	1.0
Otis	43%	79%	0.3
Paden	38%	73%	0.6
Ruby Bridges	19%	60%	0.9
Wood	65%	83%	0.8
Districtwide	41%	70%	0.6



# Who Helped Partner with Us on a Blueprint for Environmental Literacy?

- ▶ AUSD is a BaySci District
- ▶ AUSD is a Change Scale Inaugural District
- ▶ AUSD is the second district named a NOAA Ocean Guardian District



# Vision for Environmental Literacy

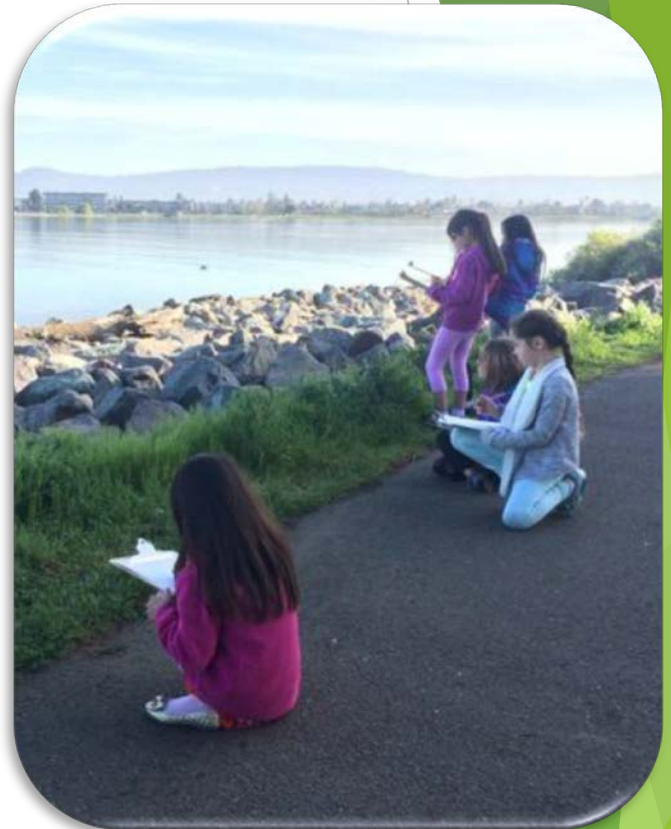
- ▶ Every student in Alameda will feel connected to the outdoors through regular and consistent field trips, access to service learning experiences, and integrated classroom and field-based experiences.
- ▶ Through scientific inquiry, critical thinking, and environmental know-how, students will graduate prepared to solve the world's environmental problems.
- ▶ To support this vision, AUSD will provide:
  - A garden at every elementary school
  - A nature center at every high school





# Environmental Literacy Planning

- ▶ Cultivating a cohesive provider network
- ▶ Working with others on outdoor experiences commonly offered across all district schools
- ▶ Teacher Institute offered as PD last summer
- ▶ Additional paid teacher time to help them articulate strong connections between environmental literacy, existing curriculum, state standards, and provider programs
- ▶ Created a “Supporting Environmental Literacy Experiences” plan that identified environmental literacy themes at every grade, developed classroom-based units, and associated provider programs to help us work together across all our schools so that all our children have equitable access to outdoor experiences that support AUSD’s increasing focus on science curriculum that helps us bridge learning on our campuses to learning about our community and world



# Supporting Environmental Literacy Experiences

Grade	Env Lit Focus	Env Lit Experience	FOSS	EEI
<b>K</b>	How Organisms Survive	Schoolyard Experience	Trees & Weather	The World Around Me
	Structure & Function		Animals 2x2	
<b>1</b>	Weather	Walking trip to Bay	Air & Weather	Surviving & Thriving
	Natural Resources		Plants & Animals	
<b>2</b>	Weathering & Erosion	Crab Cove or LMS Nature Center	Pebbles, Sand, & Silt	The Earth Rocks
	Growth & Development		Insects & Plants	

# AUSD Resolution - Environmental Sustainability

The Alameda Unified School District unanimously passed a resolution for AUSD Environmental Sustainability on April 25, 2017. The wording of the resolution is as follows:

*WHEREAS, Alameda schools have the potential to make positive, tangible environmental change* in the world while teaching students to be stewards of their communities, the earth, and its resources; and

*WHEREAS, Alameda Unified School District (AUSD) has considerable opportunity through its purchasing power to improve its environmental footprint, benefiting both the environment and its financial situation*; and

*WHEREAS, change within schools can help catalyze change in the broader society; and*

*WHEREAS, many opportunities and choices exist for Alameda schools to use natural resources more efficiently; to reduce, reuse, and recycle; and to purchase clean energy and environmentally preferable products and supplies to protect our global environment; and*

*WHEREAS, Alameda schools have a tremendous opportunity to teach children about ecological sustainability, environmental health, and nutrition; meet math, science, and social studies standards; integrate environmental and sustainability education into the curricula; and support students to become leaders in making their own community a healthier and more ecologically sustainable place; and*

*WHEREAS, community groups, businesses, nonprofits, and governmental agencies are partnering with schools to support sustainability initiatives*; and

# AUSD Resolution - Environmental Sustainability

*WHEREAS*, the California Department of Education's Blueprint for Environmental Literacy is a lens through which to teach and learn current instructional content, including a knowledge of the interconnections and interdependency of ecological, social, and economic systems; and

*WHEREAS*, AUSD was invited to participate with Change Scale to implement the Blueprint for Environmental Literacy at the local level; and

*WHEREAS*, the City of Alameda has adopted a Local Action Plan for Climate Protection with a goal of reducing greenhouse gas emissions and identify AUSD as a key partner in achieving its greenhouse gas reduction goals; and

*WHEREAS*, the state legislature has enacted Assembly Bill 341 and Assembly Bill 1826 requiring all commercial generators, including schools, to recycle and compost; and

*WHEREAS*, the Alameda County Waste Management Authority has adopted a countywide ordinance requiring all commercial generators, including schools, to ensure that readily recyclable and compostable materials are appropriately separated from landfill trash; and

*WHEREAS*, the Board of Education adopted a Preferred Partner resolution with the Alameda County Waste Management Authority to receive their support for 90% diversion by 2020; and

*WHEREAS*, AUSD has partnered with Cenergistic to reduce energy consumption through primarily changing employees' behavior and precisely tracking data related to energy use; and

*WHEREAS*, AUSD is increasing energy efficiency by installing energy efficient light-emitting diode (LED) lighting at all school sites pursuant to funding from Proposition 39; and

# AUSD Resolution - Environmental Sustainability

*WHEREAS*, nine years have passed since the Board of Education first adopted its Green Schools Resolution; and

*WHEREAS*, since that time Alameda Unified School District has launched the Alameda Green Schools Challenge which strives to increase our recycling rate from 70% to 90% by 2020; identify a Go Green Site Coordinator at each school site and establish uniform recycling and composting programs at all schools and district facilities; reduce greenhouse gas emissions; and create zero waste cultural change in our community; and

*WHEREAS*, excellent work is being performed by students, teachers, custodians, parents, and administrators to implement comprehensive recycling and composting at all school sites increasing their recycling rates from 41% to 70% and providing a model for the district and the community; and

*WHEREAS*, AUSD won a Golden Bell Award from the California School Boards Association for its achievements in waste reduction and recycling; and

*WHEREAS*, Bay Farm School and Alameda Science and Technology Institute (ASTI) have been designated as Green Ribbon Schools by the California Department of Education; and

*WHEREAS*, there should be pride in the work of student environmental clubs at each high school and Go Green Site Coordinators at each school; and

*WHEREAS*, AUSD and Alameda Municipal Power are working together to support the goals of the district's Conservation, Energy Efficiency, and Generation (CEG) Plan; and



# AUSD Resolution - Environmental Sustainability

*WHEREAS*, AUSD is implementing its Facility Master Plan which includes initiatives to reduce energy use and identify opportunities for generating renewable power on site at its facilities and grounds; and

*WHEREAS*, the district and Alameda Municipal Power have already implemented energy-efficiency retrofits that have saved the district over \$2.2 million since 1995; and

*WHEREAS*, this framework creates a long-term, inspiring vision that integrates and strengthens many efforts in our district; and

*WHEREAS*, fully implementing this resolution will take time, leadership, and collaboration, and must be achieved in stages;

*THEREFORE, BE IT RESOLVED*, that AUSD will continue its excellent progress toward creating three environmentally friendly school sites through comprehensive recycling and composting, energy efficiency, water conservation, bay-friendly landscaping, and integrated pest management; and

*BE IT FURTHER RESOLVED*, that AUSD will seek opportunities to continually reduce its consumption of natural resources; and

*BE IT FURTHER RESOLVED*, that AUSD will explore options to enhance healthy environments on its campuses; and

*BE IT FURTHER RESOLVED*, that AUSD will support the Change Scale working group to implement the Blueprint for Environmental Literacy at the local level; and

# AUSD Resolution - Environmental Sustainability

*BE IT FURTHER RESOLVED*, that AUSD will seek opportunities to work with Alameda Municipal Power to cost-effectively implement on-site generation of renewable power on its buildings and grounds; and

*BE IT FURTHER RESOLVED*, that AUSD will encourage the development of school gardens and green schoolyards at every school as hands-on learning tools that promote good nutrition, stewardship of the land, and teach to standards; and

*BE IT FURTHER RESOLVED*, that AUSD will seek partnerships with local community groups, business leaders, nonprofit organizations, and government agencies to support and increase sustainability initiatives in its schools; and

*BE IT FURTHER RESOLVED*, that AUSD will provide leadership to assist the implementation of this resolution through biannual meetings of the Alameda Green Schools Challenge Committee (with representatives from each department and school site) to monitor progress, manage community partnerships, and further develop educational programs focused on sustainability;

*NOW, BE IT RESOLVED* that the Alameda Green Schools Challenge Committee will, on or near Earth Day, give an annual report on the Alameda Unified School District's achievement towards its environmental goals, sustainability initiatives, community partnerships, and educational programs.

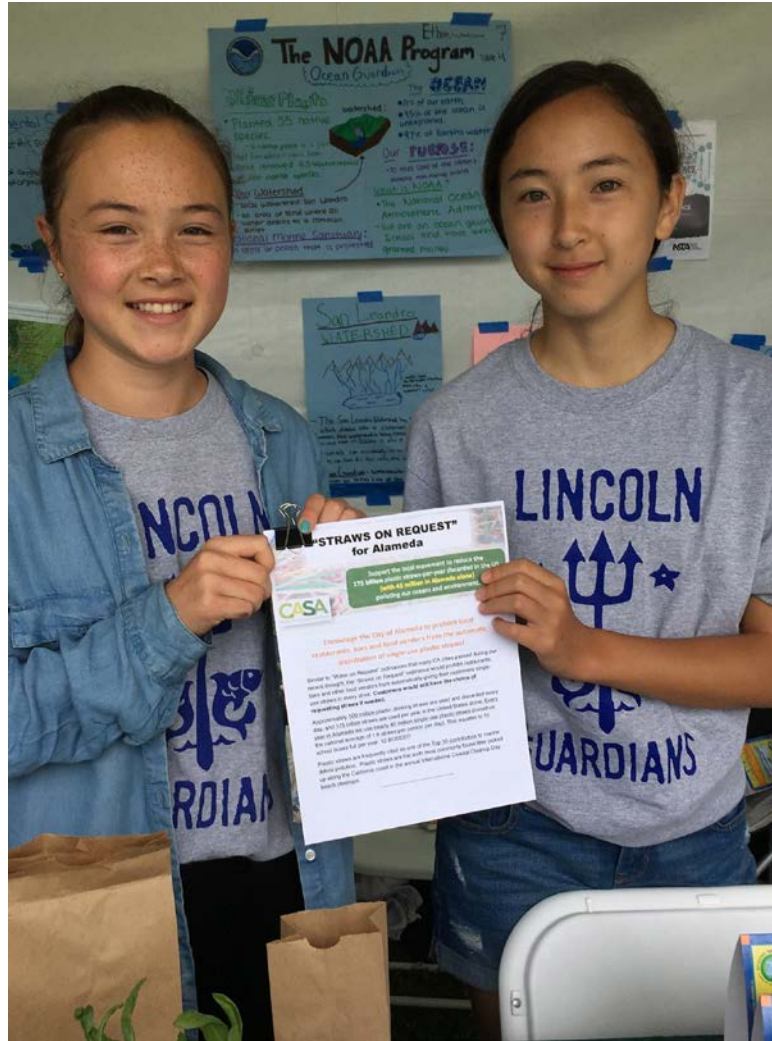
# AUSD School Gardens



Students working in Bay Farm Elementary School garden.



# Middle School Service Learning



Lincoln Middle School students holding petitions to Alameda City Council and wearing NOAA Ocean Guardian t-shirts.

# High School Service Learning



Alameda High School students applying their AP Environmental Science learning with Stop Waste partners.



# Learning About Green Power



Alameda High School students learning about clean and green alternatives to powering home appliances.

# Learning From the Bay



Wood Middle School students learning about how to be good stewards of their bay wetland environment.

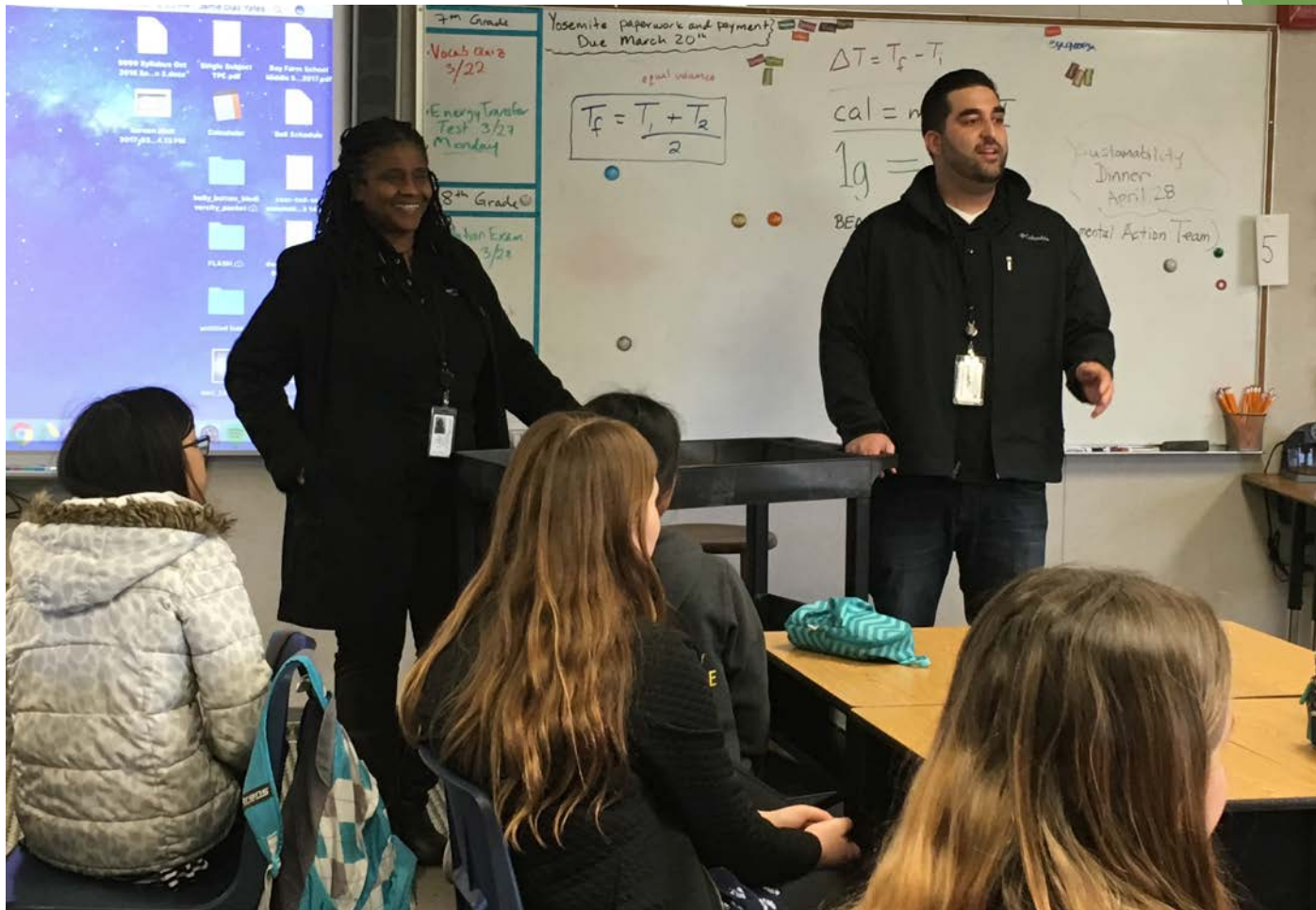


# Learning From the Bay



Encinal High School students learning about how to be good stewards of their bay wetland environment.

# Greening Food Services



AUSD Food and Nutrition Services staff teach middle school students about their efforts to help avoid costly and environmentally detrimental use of unnecessary plastics!



# Go Green Waste Diversion



Who knew learning about waste diversion, recycling, and composting could be fun?



# Custodians as Crucial Partners



Our favorite field trip destination at the Davis Street Transfer Station!