

Environmental education through action

KIDS for the BAY



Newsletter SPRING 2019

www.kidsforthebay.org

A Project of Earth Island Institute

School District-Wide Partnership

In a special partnership with the City of Alameda, Alameda Unified School District (AUSD) and Alameda elementary schools, KIDS for the BAY is delivering the Watershed Rangers Program (WRP) to every third grade class in Alameda. This exciting, hands-on environmental education program, funded by the City of Alameda, helps the City meet its goals for a clean, healthy, Zero Waste environment. The WRP helps AUSD meet its goals for district-wide Environmental Literacy Scope and Sequencing, and helps KIDS for the BAY engage every Alameda third grade student in meaningful, impactful watershed stewardship education.

"All storm water in the City of Alameda eventually flows into the San Francisco Bay untreated, and with it, everything it picks up along the way like trash, oil, and grease. KIDS for the BAY's Watershed Rangers Program teaches the next generation of leaders the importance of protecting the environment. Our third graders in Alameda are helping reduce trash and waste at the source BEFORE it reaches the City's storm drains. Reducing trash and litter that can enter the City's storm drain system is vital for the health of the bay."

— Marc Bautista, Clean Water Program Specialist, City of Alameda

Surrounded by miles of accessible, beautiful bay shoreline, Alameda schools have a unique educational resource right in their back yard! In the Watershed Rangers Program students construct a three-dimensional model of the San Francisco Bay and mix



"The Watershed Rangers Program engages young students in understanding the importance and fragility of the San Francisco Bay watershed, and supports them in taking action to protect it. Classes determine their own Action Project, and students learn very concrete ways that they can each contribute to caring for the environment, creating habits that can last a lifetime."

— Terri Elkin, Education Coordinator, Alameda Unified School District

fresh water and salt water to create brackish water in the estuary. They learn how pollution spreads through this ecosystem, complete a trash clean-up project and learn to reduce trash and waste at the source by practicing the Five Rs: Reduce, Reuse, Recycle, Rot and Refuse. Students organize Zero Waste Lunch events, teach younger buddy classes to protect the watershed, and complete beach trash clean-up projects.

Alameda teachers love working with KIDS for the BAY to teach their students about the local watershed and to inspire them to help take care of their environment. Teachers learn the Watershed Rangers Program alongside their students, with hands-on professional development that helps them teach locally relevant environmental education and supports Next Generation Science Standards. In the new KIDS for the BAY Blue Watershed Classrooms Project, to be launched in the coming school year, partner teachers will also have the opportunity to develop a Blue Watershed Classroom that is watershed-friendly and Zero Waste, with ongoing support from KIDS for the BAY.

KIDS for the BAY is very thankful for this wonderful partnership with the City of Alameda, Alameda Unified School District and the teachers, students and families of Alameda schools, which is helping all of us work together for engaging environmental education and for a cleaner, healthier environment.

"I think students are now much more aware of their actions, and how their actions affect the environment. I think they also feel like they have some power over making things better."

— Elizabeth Escalante, Third Grade Teacher, Ruby Bridges Elementary School, Alameda



Program Highlights

Low Tide Bay Field Trip

"I held ten different crabs! Some were really small and they all tickled my hands," shared Adalee.

Fourth grade students, from Madera Elementary School in El Cerrito, spent a wonderful day with KIDS for the BAY at Keller Beach in Richmond, studying the rocky shore habitat, bird-watching, and cleaning up trash from their local shoreline!

Students were most excited to discover the organisms that lived and grew on the rocks that were exposed by the low tide. After talking about the adaptations of these organisms, our young scientists began searching for crabs, mussels, limpets, clams, barnacles, sea lettuce and more fascinating organisms.

"Are these mussels still alive?" asked Enam, pointing to a closed mussel. After learning about how mussels attach to rocks during high tide, and close up their shells to conserve water when they are exposed at low tide, students excitedly climbed over the rocks pointing to all the mussels they found that were showing this adaptation!

"Who learned something new on our Bay Field Trip?" asked KIDS for the BAY Instructor, Valerie Lowe. Every student raised their hand to share what they had learned and many of the parent chaperones raised their hands as well! "I learned about new birds and their feeding adaptations while we were bird watching," shared Richard.

As well as engaging in fun, hands-on learning, our Inspired Environmentalists from Madera Elementary cleaned up 40 gallons of trash from the bay shoreline to help protect this special habitat from marine plastic pollution!



School-Wide Zero Waste Lunch Event

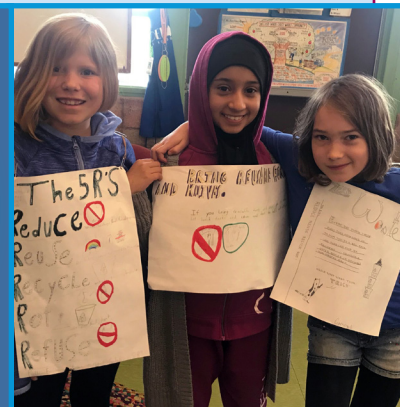
Madera Elementary School fourth grade students in the KIDS for the BAY Watershed Action Program did not stop at cleaning up trash from Keller Beach! These Inspired Environmentalists and their teachers, Hilary Milani and Melanie Phippard, decided to organize a School-Wide Zero Waste Lunch Event to significantly reduce trash and waste that can impact the watershed.

Students made posters to display around the school to advertise the event, and gave presentations to students in other classes to teach them about why it is important to protect the environment by reducing trash and waste. "I think if we go and visit our old teachers and tell their students about why a Zero Waste Lunch is important, they might want to participate," said Juliet. "I want to tell them about storm drains, because other kids need to know that if they litter, a storm drain will carry the trash to the bay and the ocean," shared Leilani.

On the day of the Zero Waste Lunch Event, the fourth grade students took charge and visited each class, counting the number of reusable items students had brought in their lunch boxes. Kindergarten classes brought in 225 reusable items, therefore preventing 225 pieces of trash from entering landfills that day! In each grade level, students brought in over 100 items, for an amazing school-wide total of 1,305 reusable items!

"I would like our school to continue doing this every week, because it's not enough to just do this once. We need to change our habits around trash!"

— Hilary Milani,
Fourth Grade Teacher,
Madera Elementary School,
El Cerrito



Program Highlights

Protecting and Restoring Wildcat Creek in Richmond

"We were real scientists today!" exclaimed Madeline. Fourth grade students from Mira Vista Elementary School in Richmond chose to take action for their watershed environment by planting native plants, performing a trash clean-up, and assessing water quality at Wildcat Creek in their local Alvarado Park. Many students shared that they visit the park with their families on weekends to hike and play.

The students participated in three different stations, each focusing on a different action to help the Wildcat Creek watershed. "I liked testing the quality of the water in Wildcat Creek by measuring the pH, turbidity and salinity of the water," shared Madeline. KIDS for the BAY Instructor Cynthia De Leon introduced the pH scale, which many students had not heard of before. Students enjoyed a tutorial on how to measure pH and what the resulting colors and numbers mean. They were reassured to discover that Wildcat Creek water is neutral with a pH of 7. Students determined that this result shows that the habitat is a good place for invertebrates to survive and grow healthy exoskeletons.

To help restore the Wildcat Creek habitat, East Bay Regional Park District Supervisor for Wildcat Canyon Steve Donnelly worked with our fourth grade environmentalists to plant native plant species on the creek banks. The plants were

planted in sites that were once covered by English Ivy, an invasive plant that park staff is working hard to remove. Students planted a variety of trees and shrubs including:

coastal live oak, California buckeye, ninebark, dogwood, snowberry, and red flowering current. "I really enjoyed planting the buckeye," shared Owen. "And I learned that Native American people historically used the seeds to stun fish so they could catch them."

Mira Vista students were very excited to conduct a trash clean-up around their park to prevent trash from harming their local watershed. "I am finding a lot of trash hiding in the bushes and ivy that we must clean up!" exclaimed Madison. "This

trash could get into Wildcat Creek," added Isaiah. Another student named Drake shared, "Wildcat Creek flows out to the bay and the bay connects to the ocean, so the trash would really spread." The students collected a variety of trash, mostly plastic. They found bottle caps, food wrappers, and cigarette butts. In total, students collected 216 pieces (11 gallons) of trash.

Mira Vista students were very proud of the wonderful job they did monitoring, protecting and restoring Wildcat Creek and their local watershed. This special Action Project Field Trip was part of the KIDS for the BAY Watershed Action Program, which includes hands-on science Classroom Lessons, Field Trips to creek, bay and ocean habitats and environmental Action Projects for students, as well as professional development in environmental education for teachers. Please visit our website for more information.



Every Day is Earth Day!

Greening our Food

Greening our food doesn't just refer to eating your veggies anymore. According to the Environmental Protection Agency, agriculture accounts for more than 585 million metric tons of Green House Gases (GHG). The typical U.S. household's food consumption emits more than eight metric tons of GHG per year — that's equal to more than 20,000 miles driven by the average passenger vehicle! However, there are many easy ways to bring sustainable eating into our kitchens.

We can all reduce our carbon footprints by greening our food in the following ways:

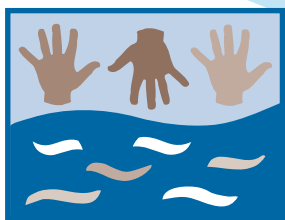
- Rethink what we regard as waste in the kitchen — carrot tops can make a delicious pesto and vegetable scraps can become a base for a delicious soup!

- Choose to eat locally — 11% of greenhouse gases in agriculture come from transporting food!

- Try out Meatless Monday — if every household in the U.S. skipped meat for just one day of each week, it would be equal to taking 7.6 million cars off the road for a year!



Photo credit: Unsplash



KIDS for the BAY

Environmental education through action

Let's get outside!

Join KIDS for the BAY for a fun-filled summer of hands-on science and nature exploration in the outdoors.

Campers will learn how every living thing is interconnected, and become Inspired Environmentalists!

Team building activities and games help to build a fun-loving, connected and caring Summer Camp community of friends, scientists and environmentalists for every week of camp!



Summer Camp 2019



KIDS for the BAY Adventures

Campers ages 5 - 7 will:

- Discover green sea anemones
- Explore bay shorelines
- Meet local wildlife
- Delve into dinosaurs
- Investigate aquatic invertebrates
- Help restore Strawberry Creek
- Enjoy belly biology.

KIDS for the BAY Explorers

Campers ages 8 - 10 will:

- Go kayaking on the bay
- Enjoy a twilight hike and evening campfire
- Visit the Aquarium of the Bay
- Take a ferryboat ride to Angel Island
- Study bay plankton using field microscopes
- Explore an ocean beach
- Test creek water quality.

KIDS for the BAY Leaders in Training (LITs)

Ages 11 - 13 will:

- Enjoy outdoor science adventures and exploring in nature
- Learn leadership skills by helping and teaching younger campers.

Special discounts available for LITs selected for this program.

"Everyone has an extra mom — Mother Nature!"

» MAYUMI

Visit our website at kidsforthebay.org/camp to choose from **seven exciting Summer Camp themes!**

Camps run Monday through Friday from 9am–3:30pm, with flexible drop-off from 8:30–9am and flexible pick-up from 3:30–4pm.

Nature Club After-Care is available from 4–5:30pm daily.

All camp drop-off and pick-up locations are in the Berkeley area.

Combined discounts and scholarship spaces are available.



"Anna thought it was 'epic.' I really loved that every day when I picked her up, Anna said she had an amazing day and told me something special she had learned. She also enjoyed making new friends."

» MIRANDA WORTHEN,
ANNA'S MOM



REGISTER NOW! www.kidsforthebay.org/camp