KIDS for the BAY

In Spring 2018, KIDS for the BAY received a $5,000 grant from the Alameda County Fish and Wildlife Propagation Fund to support our Watershed Action Program (WAP) in four Oakland elementary school classes.

For each class, the WAP included four two-hour Classroom Lessons, a creek or bay Field Trip, a neighborhood clean-up, and a service-learning Environmental Action Project.

Thanks to the support from the Alameda County Fish and Wildlife Propagation Fund, KIDS for the BAY achieved the following goals:

- 137 students increased their knowledge of watershed science in the classroom and in the field and became stewards of their local watershed.
- 137 families increased their understanding of their watershed environment and learned how to reduce storm drain pollution to the watershed.
- Five teachers increased their confidence in using the local watershed as an educational resource and empowered students to become environmental stewards.
- The WAP was integrated into the curricula and culture of partner schools and involved the school principals, teachers, students, and their families.

"The Watershed Action Program is a fantastic hands on learning program about our local area, its problems and its needs. We are grateful that it is geared so well to students' access levels."

Hanna Sufrin, Fourth Grade Teacher, Acorn Woodland Elementary School, Oakland

Visit www.kidsforthebay.org for more information!

KIDS for the BAY

Final Report to Alameda County Fish and Game Commission, December 2018

KIDS for the BAY (KftB) is pleased to share the following success stories from our Oakland Schools Watershed Action Program (WAP) during the 2017-18 school year.

Creek, Bay and Ocean Field Trips

During their exciting Field Trips, students had the opportunity to connect with nature, learn hands-on science and become stewards of the special habitat they visited.

Investigating the Rocky Shore at Crab Cove

"This is part of our watershed!" Omar said excitedly, as he and his classmates approached Crab Cove, their outdoor classroom for the day. Many of the fourth and fifth grade students from Bella Vista Elementary School in Oakland shared that they had never had the opportunity to explore Crab Cove before. They were thrilled to visit the sandy beach and rocky shore of the San Francisco Bay environment that they learned so much about in their Classroom Lessons with KIDS for the BAY. "Will we see any green shore crabs?" asked Robham, remembering the KftB Classroom Lessons, as the class prepared for their rocky shore investigation.

Teams of student scientists began exploring the shoreline, looking among the rocks. At first, the bay ecosystem seemed quiet and still but it did not take long for the students to realize that it was teeming with life. Bianca was the first to discover a green shore crab. “At first I thought it would pinch me, but as I was holding it, I realized that it is so cool! It reminded me how fragile tiny crabs actually are,” she shared. Soon, the student scientists were discovering green shore crabs under every rock and were so excited to feel these tiny organisms tickle their hands, as they held them in the “crab caves” that they made. As they fine-tuned their observational skills, students were thrilled to also find barnacles, clams and blue mussels. Tia even found an entire crab shell that had been shed. She remembered from her lessons that crabs molt and shed their entire exoskeleton when they grow and was happy to see evidence of this phenomenon first-hand.

After their investigation, student scientists discussed the adaptations that organisms would need to live in the rocky shore environment. "I think that they probably have to be prepared to be underwater or out of the water at all times, because the tide changes," shared Benjamin. "A barnacle opens up to eat when it's underwater, but will close up when the tide is low so that it doesn't dry out," explained Wisely.

Environmental Action Projects

An important part of the WAP is the Environmental Action Projects, which students choose, plan, and implement themselves, with guidance from their classroom teacher and KftB Instructor. The Action Projects are crucial because by planning and implementing their own project in their neighborhood, students become aware of the power of their actions and are empowered to become leaders and environmentalists. This approach helps students develop critical thinking, leadership skills and self-esteem. Some of this school year’s Action Projects included:

- Removing invasive plants and planting native plants in creek habitats
- Testing the quality of the water in local creeks to assess the health of the watershed
- Cleaning up trash from local creek, bay and ocean habitats
- Student-led presentations about how to safely consume bay fish to reduce intake of toxins
- Making safe, natural pesticides for use in school gardens
- Addressing California's drought by monitoring and reducing personal water usage and teaching peers and family members about water conservation.

Water Conservation Action Project

Fourth and fifth grade students in Bella Vista Elementary School in Oakland decided that a major need in their community was education about water conservation, especially during the current drought in California.

"That doesn't sound like enough water for everyone in the world," said Anthony, when he learned that only three percent of water on earth is freshwater, and even less is potable. To connect this idea to their daily lives and habits, students spent a day tracking their water usage. They made note of every time they washed their hands, flushed the toilet or took a shower. At the end of the day, they calculated how many gallons of water they used daily. Some students used 25 gallons a day, while others used 90!

The students took action by creating posters to educate their school community and families about the importance of water conservation. First, they presented the problem, stating that there is not enough water on the planet for all of the people in the world to have enough, if we continue wasting this precious resource. Each student added different ideas about how to conserve water to their posters. "We learned that making gasoline uses a lot of water," said Remember. "So I'll tell people they can ride their bikes and not only prevent pollution, but save water too!" Omar exclaimed, "I had no idea that a pound of beef would take 1,800 gallons of water to produce! If we eat less beef, we'd automatically be saving water." "I will eat less meat and that will conserve lots of water," shared Tia. "I can conserve water by collecting rainwater and using it around the house," Andrea told everyone.

Quotes from Student and Teacher Participants

"These lessons are so engaging. It's amazing how hands-on they are. My students love getting to work with their hands and to spend this time in class having fun while learning."
Noah Mendel, Fourth Grade Teacher, Greenleaf Elementary School, Oakland

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"I think everyone should have the ability to live in a healthy watershed to grow, learn and play."
Tyreece, Fourth Grade Student, Greenleaf Elementary School, Oakland

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