

# The Living Lab

## The Role of Environmental Education in Protecting Sausal Creek

As we approach the end of the 2022-2023 school year, we reflect back on a lively year of school field trips and service programs in the Sausal Creek Watershed.

We have had the opportunity to engage with hundreds of students and educators in hands-on learning experiences that have brought us all closer to the natural world.

We have explored diverse habitats in Joaquin Miller Park. Cirled up under the shade of a redwood forest, we observed the trees' flat needles and discussed their exquisite dual design for catching sunlight and creating their own "rain" from summer coastal fog. We estimated how many second graders tall these giant keystone species could grow that support the health of multi-layered, diverse life—including ourselves.



We discovered wildflowers, each with a story and one or many pollinator and organism relationships. We watched bumblebee cameos on the lupine cones, each bee gracefully demonstrating how its body is just the right weight to open a lupine flower and reach the pollen. We compared the abundance of biodiversity in restored areas to degraded habitats, counting how many different types of plants we could see, even if the names were still new to us.

On our hikes, we stopped at Lookout Point with a panoramic view of the bay. From here we could visualize how the water in our creeks that start in these hills connect downstream and continue on to the estuary, the bay, and the ocean. We contrasted the stark difference of the expansive, urbanized city to the breezy, fresh-air, open space where we stood and reflected on how critical it is to protect and enjoy these few patchwork pieces of natural space available to us in Oakland.



Our native plant nursery provides a unique setting for students to play a role in all stages of the restoration cycle. They collected and sowed seeds, propagated and transplanted seedlings, and protected these vulnerable young plants by sanitizing recycled pots for them to grow strong in before being planted out into the watershed. The nursery was also an incredibly calm and beautiful space for sensory learning and nature journaling. We spread out around the nursery grounds, each student finding a plant, an organism, or a landscape to observe that piqued their curiosity.



We have held many field trips at Dimond Park and Dimond Canyon this year, where creek access provides abundant experiential learning opportunities. We've been lucky enough to observe several resident wild rainbow trout swimming around in the cool, clear pool shaded by willows below the Wellington St. entrance—approaching quietly so as to not scare them into hiding. Seeing the trout in such close proximity to the remnants of culverts and channelized sections of the creek is a unique teaching moment: Where does the creek go when you can't see it?

These aren't isolated experiences in nature, but the foundation of a lifetime of curiosity and stewardship. On these field trips, students are taking part in large scale, science-based restoration projects—learning the “why” and “how” behind protecting habitats. We discuss the significance and role of this waterway to Ohlone ancestors and different communities over time and forge our own connections to the natural resources in the watershed.

There is urgency in fostering these connections. While people benefit from their connection with the natural environment, the environment also benefits when people feel connected and committed to caring for it. With the enormous challenges of climate change and habitat loss, it's critical to inspire and empower students to become the next generation of environmental stewards and activists in Oakland and beyond.

Lastly, there's no hustle quite like a “litter blitz competition” among classmates. Scattering throughout the park with buckets and trash-grabbers, students are skilled in finding the large dumping hot spots as well as spotting and extracting tiny slivers of plastic between rocks in the stream. They make keen observations about what types of trash we're finding and how it impacts wildlife and park visitors—not just at the source but in all the connected environments. Together, the students come up with meaningful actions we can incorporate in everyday life to reduce litter and pollution.



The skills that these youth build along Sausal Creek will be relevant for the rest of their lives. They may not remember the name of each individual plant they learn to identify, but they will always know that there is more to plants than trees, grasses, and flowers. Each individual plant has a name, a story, and a significance within its community. They will know that nature isn't static, and every action, good or bad, has cascading effects throughout the ecosystem. After a field trip with FOSC, we hope that every young student will have the confidence and agency to know that they can make a difference in the world around them.

Of course, our environmental education programming would not be possible without the support of several key grantors and donors like you. We have sought out and been awarded education funding this year from [The California Coastal Commission](#), [Save the Redwoods League](#), and [The Strong Foundation for Environmental Values](#). We are also grateful to our volunteer docents, who have generously given their time and expertise to co-lead and help make our field trips a success.

And we appreciate the partnership of the teachers, the parent chaperones, and the students themselves. After all, we're out here learning from them, too.

—Kate Berlin

