

Alameda County Fish and Wildlife Propagation Fund Report
Earth Team
Final Report - December 16, 2022

Summary

This project currently employs 41 paid high school interns to conduct restoration and improvement projects at three public park locations and three associated creeks in Alameda County's San Lorenzo Creek Watershed, focusing on supporting native plant and animal habitat and engaging community members in ongoing maintenance and education efforts.

Working with several local partners, these 41 Earth Team public high school interns developed hands-on restoration skills and applied them to various field sites thus far. Training and field activities focused on plant identification, invasive species removal, native plant installation, mulching, and other maintenance activities. In addition, the teams were trained to use our Zerolitter.org platform to map, classify and remove litter. Later in the school year, interns will also perform water monitoring at these sites.

Workplan Progress and Deliverables

Task	Proposed Activities	Activities Status/ Progress	Date Complete
1. Project Planning and Administration	Planning meetings with school partners (Arroyo High, San Lorenzo High, and Castro Valley High) and site partners (ACRCD, HARD and ACPWA) Curriculum plans/ schedule	Complete: In July, August, and September Earth Team staff met with school staff to plan for fall recruitment and first meetings of the year. Additionally, Earth Team has been in continued communication with key partners to plan and execute weekly meetings and weekend field events.	September 2022
2. Intern Team Recruitment/ Surveying	Project presentations in classes and on Zoom Interviews and team selections Distribution of pre-surveys	Complete: In August and September, Earth Team led in-person recruitment events at Skyline High School and Arroyo High School, and hosted virtual outreach for students at San Lorenzo High School and Castro Valley High School. We received 127 applications across schools	October 2022

		involved in this project and held interviews between hiring 41 interns. Pre-surveys administered during October included Project CoVitality's Social Emotional Health Survey.	
3. Internship Leadership Team Education	Intro to Watersheds and Restoration Activities Guest speaker from ACCWP, project introduction Invasive Species/ Native Species ID and Site Introduction Water Test Training San Lorenzo Creek	In Progress: Earth Team interns began meeting for weekly training events in September. Foundation lessons included introductions to watershed, local plan identification, restoration skills, introduction to climate change, Marine Debris Tracker training, and introduction to water monitoring. In-class trainings, complementary to field events, will continue through the end of the school year.	Ongoing
4. Restoration Field Work	Litter mapping and removal Invasive plant removal Native plant installation and tree planting/ maintenance Mulching and ongoing habitat maintenance Water quality testing	In Progress: Earth Team interns began their field restoration work with a visit to the Castro Valley Creek Trail for Coastal Cleanup Day. They continued restoration work with several visits to the San Leandro Butterfly Garden as well as a visit to Don Edwards Wildlife Refuge. They also began to perform water monitoring at the Martin Luther King Shoreline. Finally, they performed habitat maintenance at Sibley Regional Park. Restoration activities at local parks and water testing at local creeks and shorelines will continue through the end of the school year.	Ongoing
5. Community Education	Monthly blog posts about status of restoration activities Social media posts about local parks, recreation opportunities, native and	In Progress: Earth Team posted monthly blogs about key activities and highlights completed by interns, begin with intern introductions in September and October. Staff	March – May 2023

	endangered species, and volunteer opportunities	and students continued to post on Instagram about activities and opportunities for community involvement. Finally, interns tabled at the Castro Valley Farmers Market several times to encourage public participation in field events as well as to recruit households to participate in at-home 3 Bin system trainings. Outreach will continue during the second semester, with interns participating in community events for MLK Day of Service and Earth Day.	
6. Evaluation and Reporting	Collect student reflections Distribute post-surveys Final report Summative analysis	In Progress: Earth Team staff regularly facilitate student reflections through in person conversations or Remind surveys. This will continue throughout the school year and will conclude with post-surveys and summative reflection assessments.	July 2023

Project Visits (workdays with interns) to Date

	Visit Date	Activity	Description of Visit Expected Outcomes
Castro Valley High School	8/24/22	Recruitment	Virtual info session hosted by Earth Team staff.
	9/14/22	Litter Assessments	First meeting of the year! Interns participate in team building activities and learn logistics about the internship program. Interns practice using the Marine Debris Tracker app, participating in a litter clean up around their neighborhood.
	9/21/22	Environmental Literacy	Interns are introduced to the basics of Climate Change. Interns review the code of conduct and organize their own group agreements; interns also complete the CoVitality survey to determine mental health and learning environment comfortability and safety

	9/28/22	Litter Assessments	Interns learn about the 3-bin sorting system and how recycling works, using what they learn to waste audit their at home bins. Interns then collaborate to task plan for their Adopt 3 Bins project
	10/1/22	Restoration	2 interns participated in a community held event at the butterfly garden, weeding and watering the existing garden
	10/5/22	Outreach Materials / Design Preparation	Interns participate in team building activities and icebreakers to better know one another. Interns develop community outreach materials for their Adopt 3 Bins recruitment
	10/12/22	Outreach Materials / Design Preparation	Interns develop community outreach materials for their Adopt 3 Bins recruitment, as well as review their waste audit data
	10/17/22	Other Surveys	interns complete an at home waste audit
	10/19/22	Outreach Materials / Design Preparation	Interns develop community outreach materials for their Adopt 3 Bins recruitment, working on tabling materials and website updates
	10/19/22	Environmental Literacy	Marin Green Home Tours gave a 2 day presentation on homes in Marin that have been made more sustainable
	10/26/22	Outreach Materials / Design Preparation	Interns finalize their community outreach materials for their Adopt 3 Bins recruitment, working on tabling materials and website updates, as well as hanging up flyers to promote A3B in Castro Valley
	10/29/22	Public Events	Interns table at the Castro Valley Farmers Market to promote the Adopt 3 Bins project in their local community
	11/2/22	Environmental Literacy	Interns follow up with farmers market task, emailing folks who signed up to participate in the A3B program. Interns learn about watersheds and water quality, specifically litter in the waterways
	11/9/22	Other Surveys	Interns learn about Ecology and the sub studies within ecology, focusing on California natives, non-natives and invasives and how restoration helps in conservation efforts. Interns also get to learn a little about Native land in the East Bay and Indigenous uses for California native plants

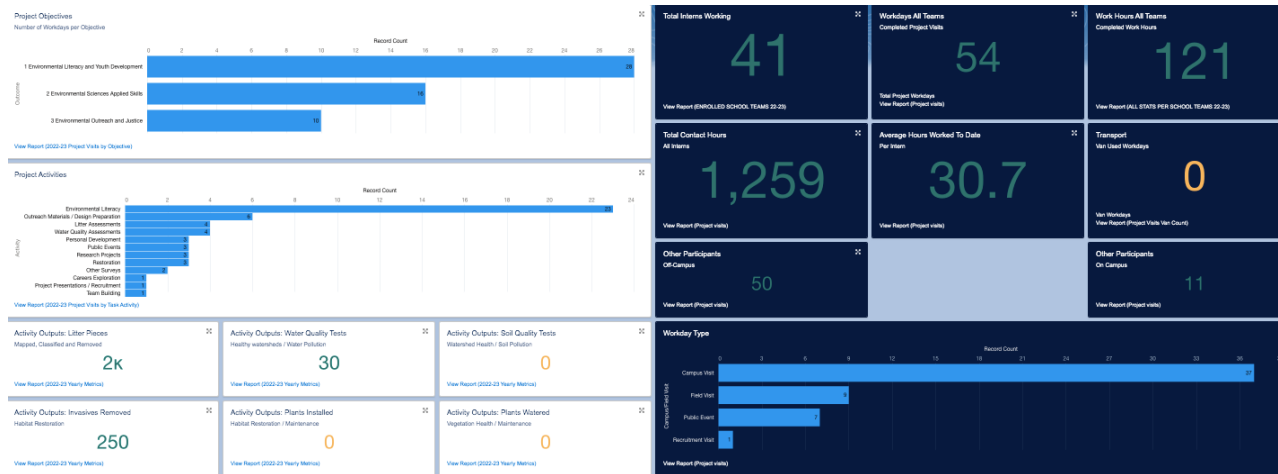
	11/16/22	Outreach Materials / Design Preparation	Interns participate in a public speaking lesson and focus on bettering their tabling skills for the next farmers market.
	11/19/22	Public Events	Interns table at the Castro Valley Farmers Market to promote the Adopt 3 Bins project in their local community
	11/30/22	Outreach Materials / Design Preparation	Interns follow up with folks who signed up for the A3B project at the Farmers Market last Saturday, as well as work on website edits and A3B blog posts. Interns participate in a campus litter clean up
	12/1/22	Careers Exploration	Climate Careers Chat introduces Exploring Environmental Justice in a Zoom panel. Interns participate if they need to make up missing hours
	12/7/22	Environmental Literacy	Interns participate in a climate change debate, taking on the role of key stakeholders to debate on a bill that would limit CO2 emissions by cars, power plants, factories, and farms
	12/14/22	Personal Development	Interns celebrate the end of their first semester at Earth Team with a potluck and Secret Santa gift exchange, as well as reflections and surveys to start the next semester strong
Skyline High School	9/14/22	Litter Assessments	Students are welcomed into the program and are introduced to the program expectations and projects. Students are introduced to the marine debris tracker and put into use during a campus clean up.
	9/21/22	Environmental Literacy	This meeting the students will focus on team building skills with name/team games. Also, students will be introduced to a presentation on climate change and its impact. Lastly, students will go over the code of conduct and sign it and create their own group agreements.
	9/28/22	Environmental Literacy	Students will focus on a climate debate as the main activity. Students will form into 4 teams to defend and refute state bills. Students will learn about climate anxiety and how to cope with it.
	10/5/22	Environmental Literacy	Students will learn about watershed health and the causes of watershed pollution.
	10/12/22	Water Quality Assessments	Students will learn about watersheds and begin water quality protocols on the fish tanks. Student will practice testing water quality for different tests.

	10/15/22	Water Quality Assessments	Students will test water quality at MLK Shoreline and conduct litter assessments along it.
	10/18/22	Personal Development	Students attend the Brower awards and learn about other youth's projects that are awarded for great work in the environmental field.
	10/19/22	Environmental Literacy	Students will learn about a carbon footprint and its sources. Students will also learn what kind of solutions that can reduce ones own carbon footprint. Students will also participate in a campus wide school clean up.
	10/26/22	Water Quality Assessments	The interns will continue on testing the water quality of the fish tanks in the classroom to further solidify understanding of the concepts.
	11/2/22	Environmental Literacy	Interns will learn about waste sorting and how to sort in their area. Interns will be introduced to the 3 bin project for Alameda county.
	11/9/22	Environmental Literacy	Interns will learn about the degradation timeline of certain objects that would deteriorate in landfill. Interns will learn what specifics materials do and do not decompose and relate it to the 3 bin project.
	11/12/22	Restoration	Interns weed and pull invasive species: French Broom at Sibley Volcanic Preserve. Interns also learn the history and species that are specific to Huckle berry preserve through a nature walk.
	11/16/22	Environmental Literacy	Interns will learn about the Carbon Sink and how each sphere is relative to one another. Interns will break out into groups and create a carbon cycle poster. Lastly, interns will work on the Adopt 3 Bin Project for our upcoming tabling at a farmers market.
	11/30/22	Environmental Literacy	Interns learn about deforestation and the history of it. Interns will learn about the cause, effects, and how to find solutions to such deforestation tactics. Interns will also participate in an activity to research on different rain forests of the world and learn about it through flash presentations. Lastly, the interns spent the last hour working on the A3B Project and get ready for next Saturday.
San Lorenzo Unified	12/14/22	Environmental Literacy	Last day of Fall Semester
	9/15/22	Team Building	First Meeting of the program. Introduction and team building activities. We will also begin marine debris tracking for the weekend event.

Schools	9/17/22	Litter Assessments	First Field Meeting, Coastal Clean Up Day, Teams will be split into groups of 3 of different earth team interns from different schools. Interns use the Marine Debris Tracker to track litter throughout the day.
	9/22/22	Environmental Literacy	This meeting the students will focus on team building skills with name/team games. Also, students will be introduced to a presentation on climate change and its impact. Lastly, students will go over the code of conduct and sign it and create their own group agreements.
	9/29/22	Environmental Literacy	Students will learn about climate anxiety and how to cope with it. Students will engage in a break out room to see how climate anxiety affects each other.
	10/1/22	Environmental Literacy	Students attend Science in the Park and learn about many different opportunities and activities about the environment.
	10/6/22	Environmental Literacy	Students participate in team building activities as it was the second time being in person. Students will also participate in a mock debate about climate change.
	10/8/22	Restoration	Students participate in restoration around the park. The students will participate in mulching and spreading it throughout the front of the park.
	10/8/22	Environmental Literacy	Extra Hour Opportunity for those who learn about watersheds and the history of the Marsh at Don Edwards
	10/13/22	Water Quality Assessments	Students will learn about watersheds and begin water quality protocols for quarry lakes. Student will practice testing water quality for different tests.
	10/18/22	Personal Development	Students attend the Brower awards and learn about other youth's projects that are awarded for great work in the environmental field.
	10/20/22	Environmental Literacy	Students will learn about a carbon footprint and its sources. Students will also learn what kind of solutions that can reduce ones own carbon footprint. Students will also participate in a campus wide school clean up.
	10/27/22	Environmental Literacy	Students begin to learn more about the adopt 3 bin project and the plans to create a garden on campus.

	11/3/22	Environmental Literacy	Interns begin planning on recruiting for different farmers markets for the Adopt 3 bin Project. Interns began picking out the native plants for their garden. Interns also begin designing the native plant garden as well.
	11/5/22	Research Projects	Students will research different native plants to plant in their garden on campus. Students will design the garden in their campus.
	11/10/22	Environmental Literacy	Students will have a refresher so far of all the meetings that have occurred through environmental jeopardy. Interns will finish up any materials that they would like to see in the garden. Interns will finish up material for recruitment for 3 bin project.
	11/17/22	Research Projects	Interns will begin laying the foundation and skeleton for the Arroyo garden. Interns will have a guest speaker from earth team to talk about the native garden and why native plants are important. Students will spend the rest of the time finishing up material for the A3B project.
	12/1/22	Research Projects	Students will finish up the materials for the upcoming A3B recruitment this Saturday. Students will finalize designs, infographics, brochures, and be separated into shift teams for Saturday. Interns will also practice with their teams to recruit for the A3B with talking points.
	12/3/22	Public Events	Interns table at the Castro Valley Farmers Market to promote the Adopt 3 Bins project in their local community
	12/8/22	Environmental Literacy	Students learn about the Carbon Cycle and the different environmental spheres. Students will learn about the flow and effect of human actions has on the spheres.

Project Metrics Dashboard



Photos and Participant Quotes

Meet the Interns Blog Posts

<https://www.earthteam.net/meet-the-san-lorenzo-unified-earth-team-interns-2022-2023/>

<https://www.earthteam.net/meet-the-2022-2023-castro-valley-high-sustainable-youth-interns/>

