



ALAMEDA COUNTY FISH AND WILDLIFE COMISSION – INTERIM REPORT

Restoring Rainbow Trout Habitats in Sausal Creek

Manuel Alonso, Earth Team - manuel@earthteam.net - December 2020

Summary

With the support of the Alameda County Fish and Wildlife Commission, Earth Team worked with one local Title 1 public high school (Skyline High) to successfully recruit a team of 14 students working as paid interns to learn about and help restore critical habitat in Sausal Creek for rainbow trout, which face threats from pollution, dumping, habitat degradation, and human activity. After project virtual presentations, 14 applicant students were successfully recruited from Skyline High School's Green Energy Pathway to serve as year-long project interns. These interns are being trained throughout 2020 and 2021 on issues of watershed health and restoration, through both classroom workshops and re-scheduled in-field service-learning activities. Once school district restrictions are lifted, we will implement these skills that they are learning at activities focused restoring freshwater ecosystems that support rainbow trout in Oakland's Sausal Creek.

Project Activities and COVID Impacts

Between July 2020 and September 2020 Earth Team was able to complete the project presentation, recruitment, in-class education and training and administrative tasks proposed for the project in Sausal Creek Watershed. When we submitted the application for funding, we expected that work sites and high schools would be open in some capacity by late fall 2020 as outlined in proposed reopening plans at the time. However, as Covid-19 continued to spread, it became clear to us that schools would likely not reopen for the remainder of the 2020-2021 school year. In anticipation for this change, we spent a significant amount of time and effort throughout June and July modifying recruitment plans, curriculum, communication platforms, and more to be adapted to virtual learning. We still maintained tentative in-person plans so that we would be able to switch between virtual and in-person meeting with agility and speed if possible. However, at this point in the year we have been unable to host in-person meetings due to continued school closures and shelter-in-place orders. Moving forward, we hope to schedule small, physically distant field events in the Sausal Creek Watershed throughout the end of March into April and May. We hope that these events will allow interns to collect data, restore some critical creekside habitat and learn restoration techniques to prepare them for continued watershed restoration efforts next year.

In the coming months, interns will be invited to meet in small, physically distanced groups of about 6 individuals. During these in-person field days, staff will direct interns through hands-on water quality data collection in Dimond Park and other sites in Sausal Creek Watershed. In addition to data collected by interns this year, the team will reflect on water quality data collected in previous years as well as public access data related to Oakland pollution levels to



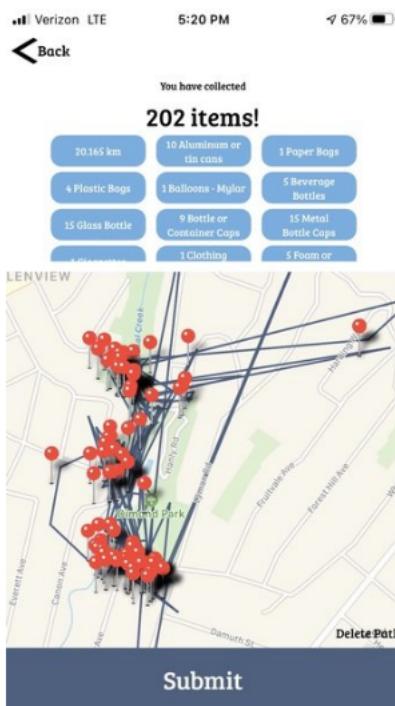
better understand threats to endangered fish species in their watersheds. Data collection and restoration efforts will continue next year as schools begin to reopen and more interns and families are comfortable with cautious in-person instruction.

Since July 2020, our Skyline High School interns have participated in extensive virtual training and workshops, meeting over 27 times. During these meetings, interns have been introduced to climate change and environmental risks, watershed management and restoration, marine debris and litter mapping protocols, career and workplace skills, local and global climate policy and more. Highlights from the year so far include a mock-COP climate negotiation activity, individual neighborhood litter clean-ups, plant and bird identification and nature journaling workshops, guest speakers and more. During individual litter clean-up events during the first semester, Skyline students cleaned up and more than 2,600 pieces of litter, and these numbers will only grow as interns continue to care for their local environments.



Updated Project Schedule (completed activities marked with checkmark)

Project Schedule of Deliverables		July 2020 to June 2021: 12 field workdays			
Rainbow Trout Restoration Internships at Sausal Creek		Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
TASK 1: Project Planning and Administration					
Planning meetings with project partners	x <input checked="" type="checkbox"/>			x	
Curriculum integration plans/ project schedule	x <input checked="" type="checkbox"/>				
Project Admin	x <input checked="" type="checkbox"/>			x <input checked="" type="checkbox"/>	x
Interim and Final Reports			x <input checked="" type="checkbox"/>		x
TASK 2: Project Presentations and Intern Recruitment					
Project presentations at 1 Alameda campus	x <input checked="" type="checkbox"/>				
Interviews and final selection of team	x <input checked="" type="checkbox"/>				
Pre Surveys, Mid Surveys, and Post Surveys	x <input checked="" type="checkbox"/>				x
TASK 3: Curriculum Implementation					
Introduction to restoration work/ ecology, applicable GLOBE wildlife biology protocols	1 day <input checked="" type="checkbox"/>				
Guest speaker and introduction to endangered fish species in California and Alameda County	1 day <input checked="" type="checkbox"/>				
Guest speaker and introduction to Sausal Creek Watershed		1 day			
Guest speaker and introduction to rainbow trout / steelhead biology and behavior				1 day	
Discussion of watershed history, water pollution issues, plastics, pesticides, dog waste				1 day	
After school site visit/ tour of trout habitat sites			1 day		
TASK 4: Restoration Field Work					
Water Quality testing using GLOBE protocols				1 day	
Native species installation, riparian vegetation				1 day	
Invasive plant identification and removal/ habitat restoration at Sausal Creek sites				2 days	
Creek side litter mapping, sourcing and removal					2 days <input checked="" type="checkbox"/>
TASK 5: Public Outreach and Education					
Public event 1: Tabling at schools					1 day
Public event 2: Attendance of networking event					1 day
Public event 3: Production and distribution of photos and/or 2 minute video documenting work				1 day	1 day
Task 4: Reporting and Evaluation					x

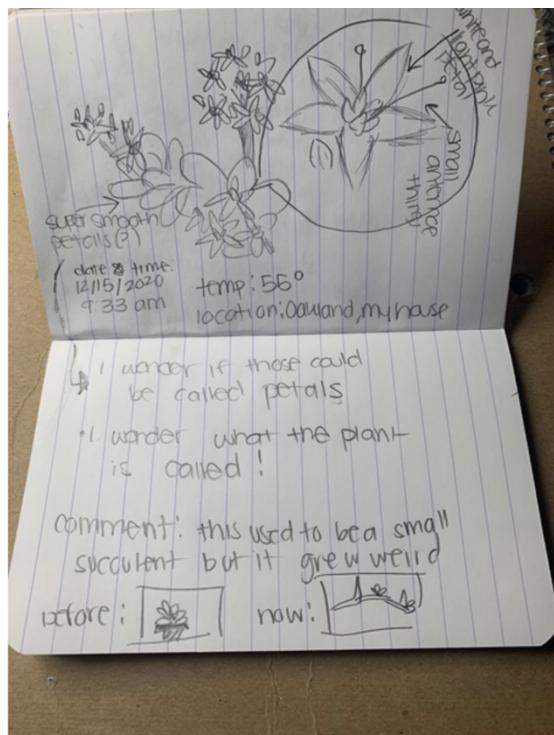


A screenshot from one student's Marine Debris Tracker App.



Makayla Connally

I'm a senior at Skyline High school. I joined Earth Team because I've been interested in a scientific career my whole life (entomology), and this internship gives me an opportunity to experience what that will be like. It's helped me gain more connections to people, from classmates to scientists, and what I learn with Earth Team also connects to my studies in my classes. Most importantly, it helped reinforce my knowledge of the importance of environmental stewardship and conscientiousness, something that's important to remember when combating climate change. Besides science and Earth Team, I am an artist who loves creating characters and storylines!



Alexander Maldonado

Hi, my name is Alexander. Alex for short. I joined the Earth team because I wanted to learn more about the environment around me. I enjoy playing video games and going on hikes to look at the wild life.