

Living Lab Fellowship Program for Sustainability

Project Overview: Going Zero Waste with Campus-Based Elementary & Preschools

Living Lab Fellowship Program in Campus Sustainability:

Offered in partnership with the Stanford Office of Sustainability and the Bill Lane Center for the American West, the [Living Laboratory Fellowship Program](#) provides Stanford students real-world sustainability leadership and project management opportunities that meaningfully advance Stanford's operational sustainability goals. Successful student applicants will be matched with a pre-identified [campus sustainability project](#), mentored by operational experts in the project field, and paid to work up to 10 hours per week over the course of an academic year on their project.

Project Background:

While focused on research and higher education, the Stanford University campus is also home to two elementary schools and six on-site early childhood education programs that serve children in the Stanford community ranging in age from infants to five years old.¹ These schools are an important part of Stanford's watershed; the compost, recycling, and landfill waste they produce is ultimately part of Stanford's waste footprint, and must be addressed as the university works to achieve its zero waste by 2030 goal, defined as 90% (or more) diversion from the landfill. Additionally, studies on k-12 environmental education have largely reported positive knowledge, competency, and even behavioral outcomes.²

Given the importance of addressing waste in Stanford's on-site elementary and pre-schools, The Office of Sustainability's Zero Waste team is installing new zero waste infrastructure and signage at the Nixon and Escondido elementary schools in August of 2023 and at the on-site early childhood education facilities in September 2023. Working with the Zero Waste Team's existing school contacts as well as key constituent groups (students, parents, teachers and administrators, and non-teaching staff) to develop and facilitate the delivery of zero waste programming at these schools will be a critical next step in Stanford's path to zero waste. Existing groups, including the California Resource Recovery Association's (CRRA) K-12 Technical Council,³ may also serve as a valuable resource for the development of zero waste content at Stanford's campus-based elementary and preschools.

Project Description:

The fellow will work with Stanford's two public elementary schools and six preschool locations on the campus to reduce the waste the schools generate, increase diversion, and decrease contamination as an important step toward achieving Stanford's Zero Waste by 2030 goal. The fellow will explore, design, and pilot strategies tailored to preschool and elementary-aged children while engaging and building support for zero waste programming among elementary and pre-school stakeholders.

¹ <https://cardinalatwork.stanford.edu/benefits-rewards/worklife/children-family/site-early-childhood-education-programs>

² Ardoin, N. M., Bowers, A. W., Roth, N. W., & Holthuis, N. (2018). Environmental education and K-12 student outcomes: A review and analysis of research. *The Journal of Environmental Education*, 49(1), 1-17.

³ <https://www.crra.com/k12-technical-council>

Desired Project Outcomes & Deliverables:

- Draft strategy for achieving zero waste at Stanford's onsite elementary and pre-schools, including plan for assessing impact/success
- Engage, inform, and build buy-in for an overarching zero waste strategy and associated programming among elementary school and preschool stakeholders
- Provide waste-focused technical assistance, trainings, and curricular content to each campus-based elementary and preschool and assess preliminary results

Collaborating Department:

Office of Sustainability (Zero Waste Team)

Escondido Elementary

Nixon Elementary

WorkLife Office: Cindy McGregor

Living Lab Fellow:

Linda Vera, B.S. '25 International Relations | lindav@stanford.edu

Project Mentors:

Julie Muir, Zero Waste Systems Manager, Office of Sustainability | juliemuir@stanford.edu

Angela Vincent, Zero Waste Outreach and Communications Manager, Office of Sustainability |

angelarv@stanford.edu

Office of Sustainability Contact:

Gretchen Engbring | engbring@stanford.edu