

Zero Waste Marin Schools Program:

Old Mill Elementary School Report



July 2017

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MARIN**

**THE
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SCHOOLS PROGRAM**

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Introduction

Old Mill Elementary School, part of the Mill Valley School District, is located in Mill Valley. It is comprised of approximately 340 students, kindergarten through fifth grade. School lunch is provided daily by Choice Lunch. Of total student enrollment, 1.9% of students are eligible for free or reduced price meal.

The Zero Waste Marin Schools Program (ZWMSP) is led by Zero Waste Marin and implemented by Strategic Energy Innovations (SEI). During this team's initial site visit, staff noted there was sufficient waste infrastructure, but classrooms were lacking compost bins. Old Mill had the support system, from their community and school district, necessary to create a strong waste-management policy. Based on these observations, ZWM decided to launch the Zero Waste Marin Schools Program (ZWMSP) at Old Mill to reduce waste through proper waste diversion and education.

Key Activities

From August 2016 to June 2017, the ZWMSP team worked alongside a supportive stakeholder team including: Old Mill Principal, Jason Deppong; Mill Valley School District Director of Operations and Maintenance, John Binchi; and Green Team teacher-leaders, Aimee Demaret and Talia Kaye. Below is a summary of key activities.

- Green Team

In August, ZWM helped to recruit and launch a Green Team. Along with ZWM, the Green Team was led by two teachers. There were approximately 40 student Green Team members. During initial Green Team meetings, ZWM trained students on proper sorting, the importance of practicing the 5R's (reduce, reuse, recycle, rot, rethink) and coming up with solutions to reduce waste at school. At lunch, Green Team students equipped with pickers and bright vests, worked to support student sorting.



Lunch monitors diligently help sort lunchtime waste in their Green Team vests.

Members of the Green Team also created skits to be performed at an Old Mill assembly. The winning skit displayed a scenario during lunch where a student sorted improperly. They then flipped the scenario and showed how the students could have altered their actions to be respectful and full of integrity. Another creative Green Team activity involved a poster-making competition around zero waste. Posters were displayed in the hallways of the school. The winners of the competition were awarded for their creativity and effective messaging.

- Classroom Assemblies

Zero Waste lessons were taught by ZWM in each classroom. During these exchanges, teachers were given new classroom infrastructure and students could ask questions about natural resources and the importance of daily sorting practices.

- Staff & Teacher Training

ZWM conducted training during a mandatory staff meeting. Staff learned about the Zero Waste Marin initiative and the importance of waste diversion. Initial waste audit results were shared and there was a Q & A session regarding individual concerns and specifics to the waste stream at Old Mill. ZWM also spoke extensively with the custodian, Hien, to gain her input on the new waste systems and insight into school trends.



Students examine new lunchtime sorting stations.

Initial Waste Audit

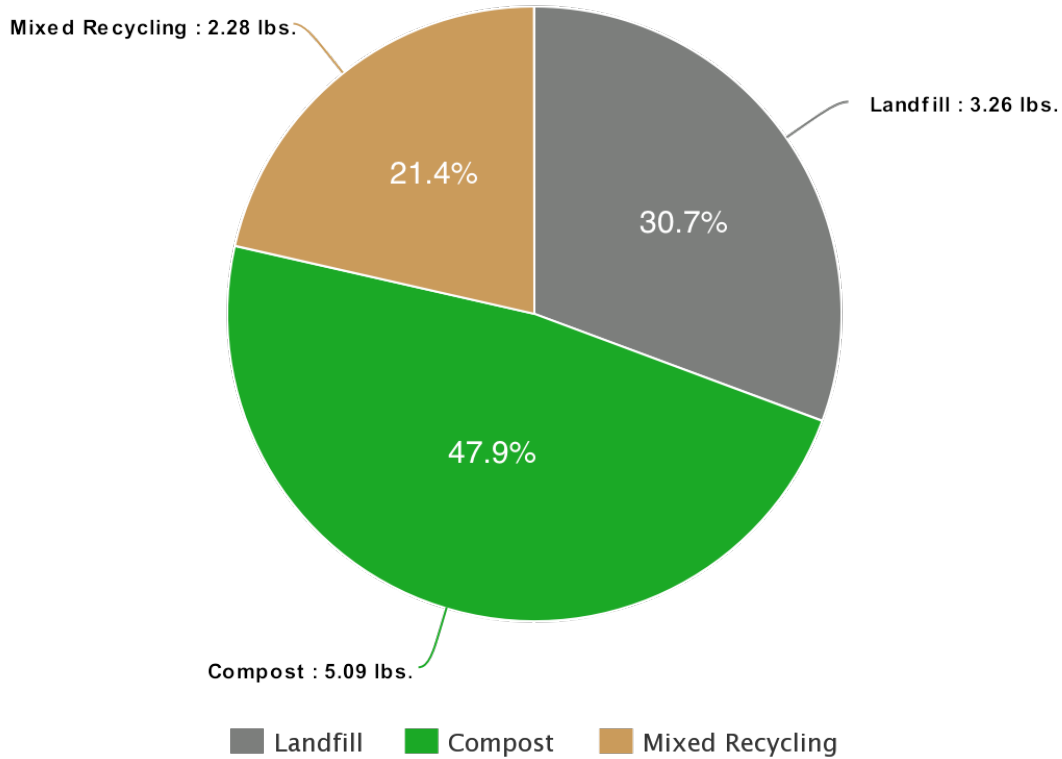
ZWM conducted an initial waste audit on September 13, 2016. A sampling of landfill bins from the school were gathered and separated into the sorting categories of hauler Mill Valley Refuse, then weighed. Of the material audited: 30.7% was landfill, 21.4% was mixed recycling, and 47.9% was compost. Partially eaten food and lunch serving ware (trays) were the most common material found in the 47.9% of improperly sorted compost.

The ZWM team, in addition to finding areas for improved sorting, noticed a large amount of single-use plastics in the waste stream – chip bags, wrappers, condiment packets, and plastic wrap coming from the Choice Lunch meals.



Student posters spread sustainability messages.

Chart 1. Initial Waste Audit Data



Best Practices

- ✓ Extremely supportive Principal, District, and Green Team teacher leads
- ✓ Green Team leads occasionally stand by bins and reward students who are sorting well with stickers to encourage them to keep up the great work
- ✓ Exceptional communication with the custodial staff
- ✓ The Green Team leads have come up with inventive and innovative Green Team activities
- ✓ Liquid bucket for lunchtime
- ✓ Bamboo utensil giveaway successfully piloted with Green Team

Infrastructure Changes

- ✓ Created and installed signage for indoor bins and outdoor waste stations
- ✓ Wrote bilingual reference guide for parent partners
- ✓ Furnished school with 17 indoor composting bins
- ✓ Distributed pickers for student lunchtime monitors to sort materials
- ✓ Equipped school with two outdoor waste stations
- ✓ Provided school with six paper-towel compost bins for all bathrooms

Areas for Continued Improvement

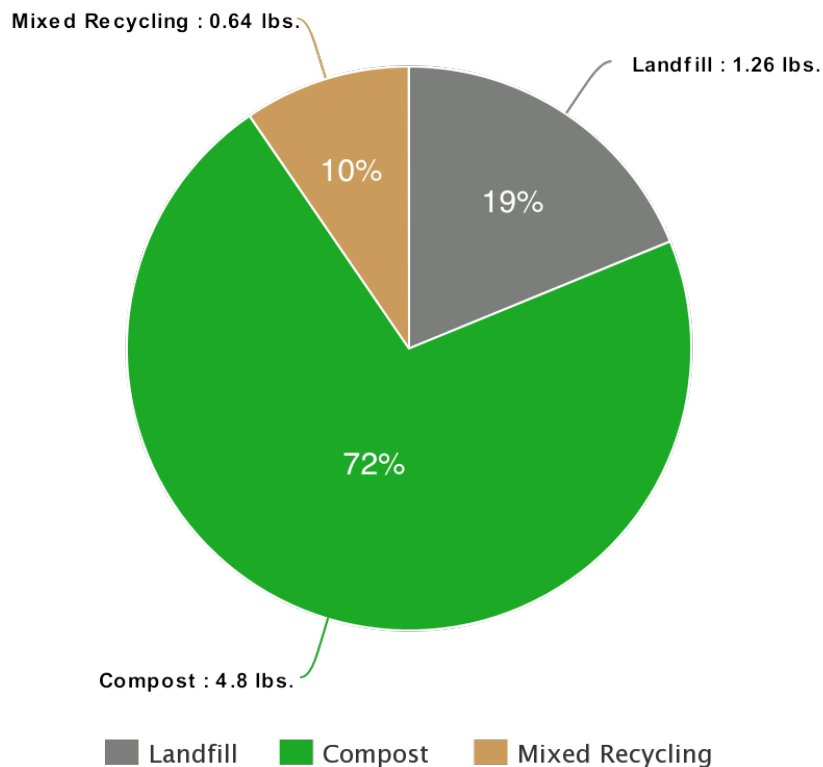
- ✓ Reduction of lunch disposables
- ✓ Green Team support for waste monitoring during snack times

Post-Waste Audit

ZWM conducted a post waste audit on May 2, 2017. Auditors were pleased to find an overall volume reduction in landfill waste from sampled areas (10.63 total lbs. in 2016 vs. 6.7 lbs. in 2017). This was a significant reduction, greater than any other school. However, due to weights of uneaten food, the majority of content weight audited was compostable (72%).

This outcome has helped to further guide the ZWMSP's school evaluation criteria.

Chart 2. Post Waste Audit Data



Summary

The Old Mill Elementary team set a strong pace for implementing change at school. Administration and facilities staff were quick to adopt best practices and pilot new processes. An existing environmental culture greatly aided in the success of the program.

With their creative team of problem-solvers, Old Mill is well positioned to continue reducing landfill material with the potential to decrease on-site service levels.