

## DOE's Creative Curriculum Award Funds Asynchronous Food Waste Course

On its own, the amount of food any individual or family throws away during one meal may seem negligible. Collectively, however, it has a significant impact through the volume of water wasted and the carbon emissions involved in both transportation and decomposition - all of which contribute to climate change.

That's what 32 teachers from 30 schools learned during three cohorts of an Asynchronous Food Waste course in the past year. They sorted, counted, and analyzed almost 200 cups of food waste and calculated its impact. Megan Rivard, PEI's Central Washington FieldSTEM Coordinator, facilitated the online workshops. "The food audit was eye-opening for a lot of people," she says. "Using Google Tools, we were able to collect data collaboratively so that each individual could compare their waste to all participants in both cohorts. It helped them understand what a problem food waste is."

The [Department of Ecology](#) funded the course through a [Creative Curriculum Award](#) as part of their [Waste Not Washington](#) program. Rivard used the funding to adapt PEI's existing [Food Waste Solutions Oriented Learning Storyline \(SOLS\)](#) into a self-paced, asynchronous course to provide teachers with a tool they could use with their students, either in person or in virtual teaching environments.

The course included two virtual field experiences with three Washington businesses: [Iron Horse Brewery](#), [Beard Ranch \(PNW Beef\)](#) and [Natural Selection Farms](#) (compost). Rivard visited each business and posed questions that teachers might typically ask during a live visit, then edited the resulting footage into a five-minute video packed with information and images. "Teachers got to reflect on those field experiences and then think about similar industry professionals they could visit in their regions," she explains.

Participants came from ten school districts serving nearly 2,700 students throughout Washington State. The award targeted educators from districts that ranked high in Environmental Health Disparities which exist when communities that are exposed to a combination of poor environmental quality and social inequities have more illness and chronic disease than wealthier, less polluted communities.

The teachers responded positively to the course content and identified the five most impactful aspects, including the direct connection of food waste solutions to climate change, local careers and community connections and the centering of Indigenous perspectives. “The most eye-opening part was the BEACN calculator and how much of an impact food waste has on water production and wastefulness of water, driving (CO2 emissions) and the amount of money literally being dumped because of wasted foods,” said one.

All the course materials are available as Open Educational Resources (OER) as well as on PEI’s website. Rivard plans to [apply for the award again](#), this time to create math performance tasks around food waste. She’d like to see more schools apply for the funding. “They can use it to help their facilities better manage food waste,” she notes. “They can apply for reusable trays, build school gardens or do composting at their school.”