Background

- Food waste accounts for ~8% of global annual greenhouse gas emissions
- K-12 schools in the US generate large amounts of waste that could be diverted; ~39.2 lbs of food waste per student per year
- Addressing food waste in schools provides a unique opportunity to positively impact waste diversion and introduce environmental education curriculum to students

Research Question

What are the barriers and benefits to composting in a K-12 school setting, and how can we support schools as they work to implement commercial composting programs?

Internship & Methods

- Interned with Cedar Grove, a commercial composter that services King County
- Performed a literature review of current research on K-12 school compost programs in the US
- Developed & distributed an online survey to 330 King County public schools, and conducted 5 interviews with school district contacts

Survey and interview results on the largest benefits, barriers, and supports for implementing composting in K-12 schools:

<table>
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<th>Barriers</th>
<th>Benefits</th>
<th>Support</th>
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<td>Lack of staff time to monitor compost bins and manage ongoing program needs</td>
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<td>Lack of funding for service &amp; materials</td>
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<td>Too much contamination</td>
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<td>&quot;[we] have observed increased engagement in changing behaviors and attitudes about the disposable vs. compostable products we use.&quot;</td>
<td>&quot;Would really like kids to see the full cycle— the use of compost directly at school, and integration into science lessons, etc.&quot;</td>
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Results

Implications

- K-12 schools are understudied when it comes to sustainability initiatives, but provide one of the best opportunities for fostering environmental awareness
- Schools need more funding, paid staff support for program upkeep, and better educational programs that cultivate student desire to compost
- Programs like the WWF’s Waste Warriors (fig. 3) can help train staff and students on the importance of waste diversion

- HB 1799 (passed 2022) will require schools, among other waste-generating entities, to begin diverting all organic waste over the next 10 years
- We need to ensure that proper infrastructure is in place to support school compost programs in being successful, long-lasting, and impactful

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