

Be a Good Sport, Don't Forget to Sort: Best Practices for Waste Diversion Programs in Sports Stadiums

HUSKY
SUSTAINABILITY
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Background:

- Waste contributes to greenhouse gas (GHG) emissions, misuse of resources, and pollution
- Stadiums generate a significant amount of waste due to packaging and food waste
- Current waste diversion programs are not achieving zero-waste goals
- Assessment strategies must be identified for the implementation of waste diversion solutions

Research Question:

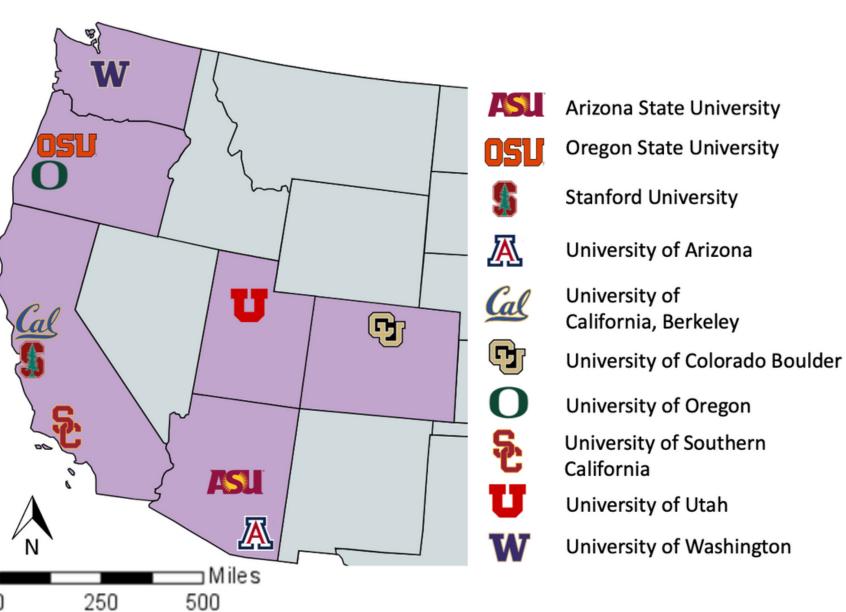
What are best practices for the assessment and implementation of waste diversion programs in sports stadiums?

Internship and Methods:

To answer my question I interned with UW Athletics. During this internship I:

- Interviewed 15 Pac-12 athletics and sustainability operations staff over Zoom this summer (Figure 1)
- Conducted a literature review on waste diversion practices in stadiums

Figure 1: A map indicating the 10 Pac-12 universities from which sustainability and athletic operations staff interviewed about barriers to reaching waste diversion goals and solutions to achieve zero waste initiatives.



Results:



There is no standardized practice for assessing waste diversion

 Current assessment strategies do not use a holistic approach and fail to take into account contamination rates and GHG emissions (Figure 2)



Waste diversion solutions are not a one size fits all approach

- Implementation of solutions depends on infrastructure, local waste services, vendors, etc.
- Unique solutions are necessary to maximize waste diversion (Figure 2)

Barriers

Financial Limitations Sustainable alternatives have

- higher upfront costs
 Limited funding for sustainable practices
- Staffing
 Shortages
 Limited staff leads to
- lack of management

 Rotating staff are
 not trained on
 current practices
- Infrastructure

 Dated structures limit implementation capability for sustainable

infrastructure

Assessment

Mapping 🙌

- Locate high traffic waste receptacles
 Display signage or place volunteers in busy locations
- Carbon Footprint
- Calculate
 greenhouse gas
 emissions to
 determine broader
 impact

Waste Diversion

Visual Sorting

 Hand sort waste to identify contaminants and ensure proper disposal

Education

- Train staff to dispose waste in correct bin
- Educate fans through interactive games and trivia

Waste Receptacles

- Locate all 3 types of waste bins directly next to each other
- Use restrictive waste bin openings

Figure 2: Graphic depicting barriers, assessment strategies, and improvements for waste diversion programs in sports stadiums based on interviews with Pac-12 staff and independent research.

Broader Significance:



These assessment and implementation strategies can be shared with other stadiums to improve waste diversion programs



Stadiums are a stage to reach broad audiences and create awareness of waste diversion efforts (Figure 3)



Social activities can influence behavior by normalizing waste diversion in a public setting



Figure 3: My internship partner and I tabling at the Husky Sustainability booth in the zone before the UW vs. Boise State game on September 2, 2023.

Next Steps:

- Explore reusable alternatives to compostable and recyclable packaging
- Invest in waste diversion technology to save money in the long term
- Establish a standardized method for measuring waste diversion

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