

Bloomington Compost Captains Program Proposal



Commission on Sustainability - Waste Reduction Working Group

In the most recent and most detailed study on the local municipal solid waste stream, Kessler Consulting Inc. reported that Monroe County generated approximately 118 thousand tons of mixed waste in 2016¹. With a population of 146 thousand at the time, this equates to an average of .8 tons (1,600 lbs) per person, or about 4.4 lbs per person per day. A further composition study revealed that food makes up approximately 22% of that total². That means an average of 352 lbs per person, or about 1 lb of food wasted per person per day.

The National Resource Defence Council (NRDC) reported in 2017 that 43% of all U.S. food waste occurs in households, which is more than occurs from grocery, distribution, restaurants, and institutions combined (39%)³. In 2013, the The United Nation Food and Agriculture Organization (FAO) reported that if food waste were a country, it would rank as the third top emitter after the US and China⁴. Finally, in its 2020 Living Planet Report, the World Wildlife Fund For Nature (WWF) states that “food loss and waste result in \$1 trillion in economic costs, around \$700 billion in environmental costs and around \$900 billion in social costs”⁵.

Recognizing the importance of waste and food waste, the City of Bloomington established the following goals in its adopted Sustainability and Climate action plans:

2018 Sustainability Action Plan Goal 5.1: “Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2023”⁶

2021 Climate Action Plan Goal WM 1: “Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction)”⁷, and

2021 Climate Action Plan Goal WM 2: “Educate, motivate, and empower the public to achieve waste reduction and diversion.”⁸

Climate Action Plan Goal WM 1 further lays out **Strategy WM 1-A** to “Increase organics diversion by 40% of 2018 values”, which includes **Action item WM1-A-6**, to

“Establish an At-Home and Community Garden Composting program supporting the expansion of food waste diversion through at-home composting. Provide backyard composting workshops, tips, and resources.”⁷

The Commission on Sustainability wishes to propose the following program to fulfill climate action item WM1-A-6 in response to this waste and food waste segment of the ever worsening planetary crises and the City’s stated intention to take action. It offers a minimal resource impact, highly distributed, low overhead, educational, and cost effective solution to handling household organics right in our neighborhoods.

The Compost Captains program consists of a set of specified roles, their requirements, and a structure with light administration that defines and manages their interactions.

Roles:

- ***Captain:*** A household that commits to receiving and actively composting organic materials provided by participants.

Requirements:

- 1) Complete a formal training using a guide & materials provided by the program.
- 2) Commitment to a given duration (proposed 6 mo.) on a cyclical renewal basis.
- 3) Provide a captain-defined “Drop-Off” window for receiving participants materials.

- ***Participant:*** A household that commits to collecting compostable organics and delivering them to a designated captain.

Requirements:

- 1) Complete a formal training using a guide & materials provided by the program.
- 2) Subscribe to the nearest available Captain.
- 3) Provide continuously uncontaminated organic materials.

Startup Outreach

In order to create a successful Compost Captains Program, existing composters must be identified to serve as Captains. We will complete this search with a couple different avenues, utilizing existing lists, programs and organizations. Our goal to launch our pilot program will be to get ten existing composters to serve as Compost Captains. As the program ages and grows, more outreach can be done to grow the number of Compost Captains and those that produce waste to be composted. Social Media will be key in conducting that ongoing outreach and promotion.

The City of Bloomington put together a list of 1 thousand households to participate in a pilot program with recycling and composting yard waste. This list of 1 thousand households (if given access) would act as a starting base for finding potential composters.

Reaching out to various Neighborhood Associations for their information regarding existing composters will build our list of potential captains. The City of Bloomington provides a public list of established Neighborhood Associations throughout the city limits. Central neighborhoods include Elm Heights, Bryan Park and Old Northeast Downtown. Neighborhoods on the east side of town include Park Ridge East, Covenanters and Hoosier Acres. Utilizing individual neighborhood maps will also assist in organizing existing composters.

Social Media is always a great marketing strategy to connect with community members. As we launch our pilot program, conducting outreach via social media platforms will allow the program to expand based on need and interest. Facebook groups

Other ways we intend on conducting outreach is to utilize our existing community facilities. Organizations and their physical facilities that already provide composting services will be great places to plant yard signs with information.

Structure:

Portal

Site requirements

Ranking

Interactions:

1. Kessler Consulting Inc., "Mixed Waste Processing Feasibility Study" (Report, Monroe County, IN, January 2018), vii.
2. Kessler Consulting Inc., "Mixed Waste Processing Feasibility Study" (Report, Monroe County, IN, January 2018), 32, 35, 38, 41
3. NRDC, "Wasted: How America Is Losing Up To 40 Percent Of Its Food From Farm To Fork To Landfill", (Report, August 2017), 10
4. Food and Agriculture Organization of the United Nations (FAO), "Food wastage footprint Impacts on natural resources", (Report, 2013), 6
5. Almond, R.E.A., Grooten M. and Petersen, T. (Eds.), " Living Planet Report 2020 - Bending the curve of biodiversity loss." (Report, Gland, Switzerland, 2020), 62
6. "Sustainability Action Plan" (Plan, Bloomington, IN, October 2018), 14
7. "Bloomington Climate Action Plan" (Plan, Bloomington, IN, March 2021), 57
8. "Bloomington Climate Action Plan" (Plan, Bloomington, IN, March 2021), 62

Outline:

I. Intro/Motivation

- A. Food waste stats
- B. CAP goal (WM1-A-6)
- C. Lowest Impact method
 - 1. Self-sustaining
 - 2. Zero transportation

II. Structure/Infrastructure

A. Roles

- 1. Captain
 - a) Training Required
 - b) Ranking to limit # of participants
 - (1) Ranking defined by ability and experience
 - (2) Example: freshman, junior, senior
 - c) Commitment to pre-defined duration
 - d) Determines Drop-Off windows.
 - e) Can terminate participants (for contamination - 2/3 strikes?)
- 2. Participant
 - a) Needs to provide contact info in sign up [given to Captain]

B. Interactions

- 1. Signup
 - a) Through web portal
 - b) Participant chooses Captain
- 2. Drop-Off
 - a) Designated Receptacle
 - b) Within the Captains specified window.
 - c) Flag Up
- 3. Cancellation
 - a) Via website,
 - (1) Participant: any time, notifies captain w/ no notice
 - (2) captain: requires 1 month warning- notifies participants
- 4. Compost Party
 - a) Annual social event for all captains and participants to celebrate efforts and build community. (Zero waste)

C. Operates on web portal for

- 1. Captains to indicate their open slots, Drop-Off Hours, Drop-off process info
- 2. Participants to sign up for their local compost captain
- 3. Communications between parties.

4. Host resources & FAQs, Open Community forum
- D. Site Constraints
 1. Adherence to local code
 2. Accepted Material
- E. Drop-off procedure
 1. Have Guidelines for the drop-off process
 2. Leave some definition up to the discretion of the Captain.
 3. Weight/volume/frequency limit. (5 gal / participant / week?)
 4. Violations can result in termination by the Captain (2-3 documented strikes?)
 5. Using lidded 5-gal buckets; 1-for-1 swap full bucket with clean empties.
 6. Placed in designated receptacle crate with flag

III. Resources

- A. Administrator Guidelines
 1. Initial Setup
 - a) Materials setup
 - b) Web Portal Design Description
 - c) Initial Captain Training
 2. Maintenance/Upkeep
 - a) Captain Training? (or captains train captains?)
 - b) Web portal management
 - c) Material replacement
 - d) Recruitment?
 - e) Composting Compliance check-ins?
- B. Captain
 1. Proper composting curriculum
 2. Process for advancing rank
 3. Penalties for improper composting
- C. Participant
 1. Best practices on working with your compost captain
(Can freeze food waste so doesn't smell)
 2. Guidelines on drop-off procedure
 3. Penalties for contamination & drop-off violations
- D. A virtual space for participants to exchange/leave feedback

IV. Startup Outreach

- A. Identifying Existing Composters to serve as captains
 1. 1k HwM mailing list [Devta]
 2. Neighborhood Associations
 3. Compost Container sale buyers
 4. MHC or Hoosier Hill Food Bank
 5. Other lists?
 6. Target 10 captains to start (adjust based on survey results)

- B. Generate Interest
 - 1. Social media
 - 2. Posters?
 - 3. Yard Signs
- C. Survey

V. Program Obligations

- A. Time
 - 1. Web-portal creation
 - 2. Tracking Captains & Participants
 - 3. Training
 - 4. Composting compliance check-in
 - a) Sr captain responsible for making check-ins?
 - 5. Recruitment?
- B. Money
 - 1. HAND grants / ESD Subsidy ?
 - 2. Compost Bin Materials
 - 3. Buckets+Lids?
 - 4. Drop-off boxes
 - 5. Web hosting/App Dev?
- C. Materials
 - 1. Browns
 - 2. Buckets w/ Lids
 - 3. Drop-Off Box
 - a) Secondary value of curb appeal

Process flow

- Household interested in Participating
- Find captain on website
- Signup
- Captain gets notification of enrollment
- Participant receives 5 gallon bucket
- Follows drop-off procedure, picks up clean bucket
- Captain processes material
- Compost sale / distribution?