

ScrAPPs

Megan Cooksy, Business Management, John Costa, Business Management. Tucker Bell, Business Management/Supply Chain Management. Jake Hartman, Business Management.

Abstract

ScrAPPs is a non-profit, sustainably engineered waste compactor can that will transform leftover scraps of food into compressed blocks of compost for the surrounding community to use in their own gardens and yards at their homes. The cans will be designed so that each deposit is tightly compressed into the base of the can. When deposited into the bottom of the can the already existing dirt will get nourished by the compost. This compressed mixture of dirt and compost material will be available for the public to come and take for their plants at home.

Holds 100 gallons of compost/dirt at one time. Phone trackers and subscriptions to ScrAPPs offers locals to better engage in the process. Because we are non-profit, the solar panels and costs for replacing over time will be donated through various supporters and solar farms. The Ad space on the side of the cans will act as another source of revenue.

Goals / Mission Statement

- Create a new way to save the thousands of pounds of food wasted in the Boone and surrounding areas.
- Encourage the community to compost and create home gardens.
- Provide easy access for composting opportunities for all people interested in sustainability.
- Educate the community and schools about why composting can benefit them and the community as a whole.

Advantages of Public Self-Sufficient Compost

- No energy needed for compacting process because of solar power.
- Provides an easy-to-access way to help reduce waste.
- Less waste being dumped into the landfills.
- Reduces the need for plastic waste bags; less plastic use.
- Healthier plants and gardens
- Self sustaining features creates a “self cleaning” benefit (low maintenance).



Triple Bottom Line

PEOPLE

- Social responsibility
- 50 million Americans have food insecurities, with ScrAPPs, and the knowledge of self production, families can easily provide for themselves and save money.
- Easy way to bring the community together.
- Education on global climate change and landfill pollution.
- creates local jobs

PLANET

- Energy, water, and land used to provide the food.
- GHG generation when food scraps degrade in landfills
- Self sufficient engineering provides less energy input.
- Reduced waste in landfills
- Reduced water use
- Cleaner produce, less use of pesticides and other harmful chemicals.

PROFIT

- Disposal costs, retailer shrink, consumer out-of-pocket costs.
- Small .25 fee provides enough for the city to continue to maintain these cans.
- Compost used and motivation produced for gardens saves on produce costs.



Budget

Object of Expense	Cost/Year
Manufacturing/Installation (Initial one time cost)	\$4,000
Maintenance	\$35
Marketing/ Pre-Launch Campaign (social media, posters, word of mouth)	\$100
Total expected expense for year 1	\$4135
Total expected expense per year after initial year	\$50
Community Profits	
General Donations, Solar Panels from farms	
Volunteers	
Unit Profits	

Payback Period/ Break-Even Analysis

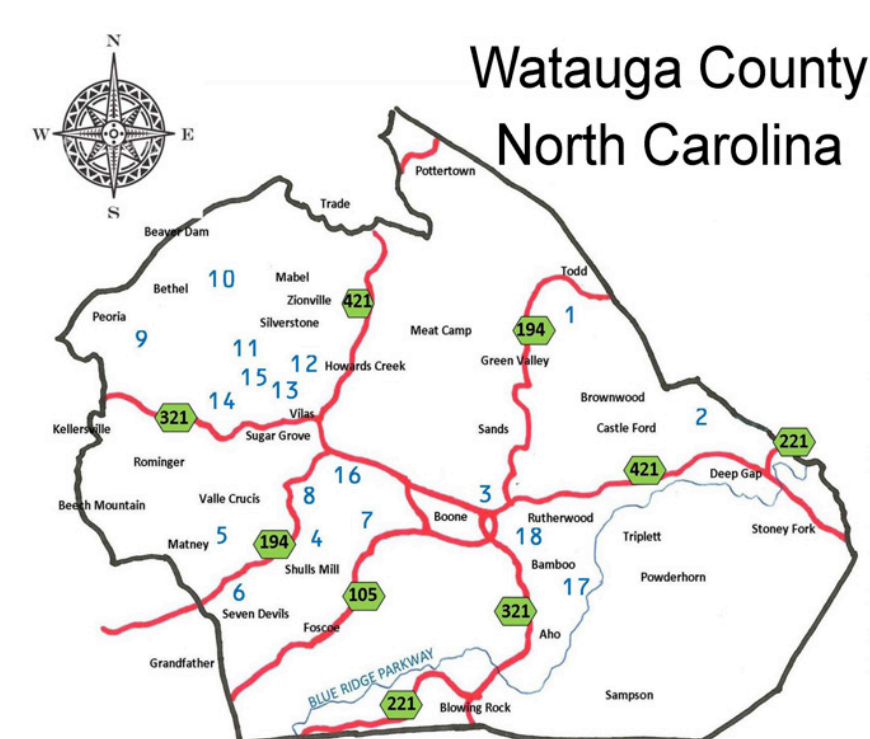
This operating budget is based on the costs of maintaining and using one compost unit. Numbers could vary depending on unforeseen variables involving number of compactors, defects, and donations. The estimated number of uses to break even on the cans per bi-weekly based on a \$.25 fee should be around 800 pounds of waste, or one full can. 800 pounds of waste bi-weekly will amount to \$200 income every two weeks, or \$52,000 annually. Based on initial costs, it would take approximately one year to break even.

How It Works



Target Audience

ScrAPPs will primarily target the 35,000 residents of Watauga County and visitors who stroll up and down King Street. Being that Boone is already an advocate for sustainability, this area is the perfect place to target those with the desire to reduce reuse and recycle anything they can. This ScrAPPs can, will involve everyone and is a fun way to introduce the idea of home compost as well.

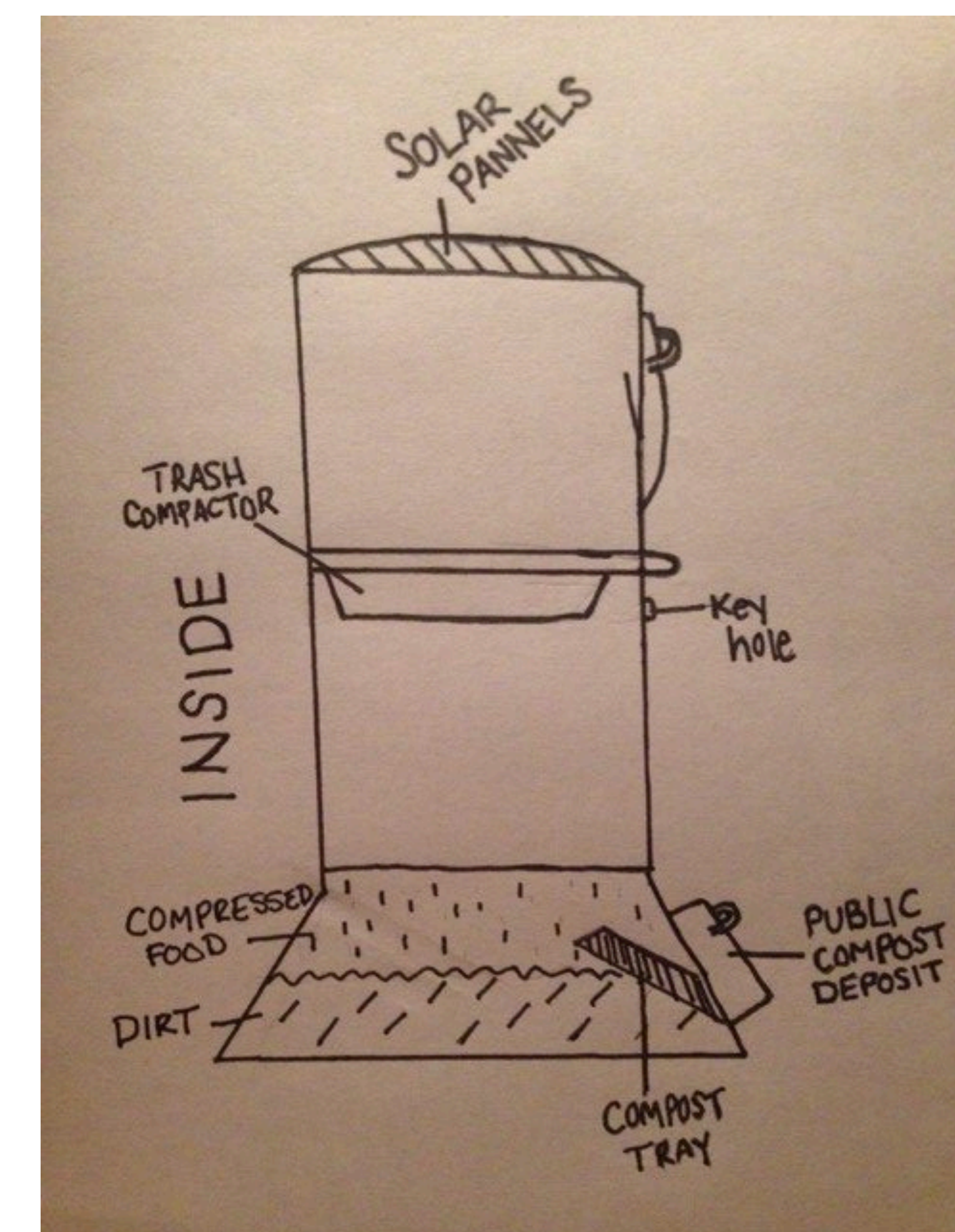


FAQs

- Who is paying for ScrAPPs?
Donations from YOU, our locals, and other organizations such as solar farms.
- Is ScrAPPS truly sustainable?
○ Not 100%, small maintenance costs and management will be minimal.
- Who will benefit most from our composting units?
○ Those who use the compactor can receive a kick start for growing gardens, children and schools can be educated on why composting is important, and humans in general because of the reduce in landfill emissions that we will breathe.
- Why use ScrAPPS?
○ Mankind lives in excess, with excess comes waste, with waste comes ScrAPPS. Reducing our harm on the planet with every use.
- Where does the power come from?
○ The cheapest power on earth, SOLAR
- How long does a single unit last?
○ 10-15 years



contact us at scrAPPs@gmail.com for inquires



Conclusions / Future Outlooks

- Reducing the overall emissions from landfills for a healthier community.
- Increase in the amounts of community gardens and homegrown produce which provides healthier lifestyles.
- Expanding from king street, throughout campus, and in Blowing Rock but to neighboring towns. After success on more of a local scale this can expand into the larger cities in the state and even throughout the country.
- This all with the objective in mind to promote, create, and establish a community that reduces waste and has healthier natural gardens.
- With hope this will evolve into personal trash compactors that create compost at every home.
- Engage Appalachian State in “Waste Wars” (prizes for departments with the most saved compost) to promote and engage the students in the education, use, and expansion of ScrAPPs.