

# Compost Facility Design Ideas



## Compost Building

NRCS Compost Facility (Practice Code 317)  
The image on the left was taken from the [nrqs.usda.gov](http://nrqs.usda.gov) website. The proposed compost design research project will take this facility design and integrate a leachate design to collect “compost tea,” to protect surrounding soil quality. Water collection will also be added to improve rainfall and excessive runoff to protect water quality.



## Leachate Collection, Analysis and Application

The first two bays are empty and show the slatted concrete bays. The leachate or “compost tea” can be collected in a slanted reservoir and pumped out to fertilize fruit trees/shrubs directly. This leachate will also be measured and tested for nutrient and contaminate analysis to make is safer and environmentally friendly to apply.

## Water Collection

There are a variety of rainwater collection systems that could be considered for this project. Plastic barrels will provide longevity and less maintenance. They are versatile and simple to connect overflow piping, spigots and filtration systems. These images were collected from a few different sources and could be implemented into the design project. A drip distribution system can be put into place to support irrigation for fruit crops and native flowers/grasses. A filtration system can be added to ensure that unwanted bacterium are not introduced into the soils and surrounding wetland and watershed.

### Rainwater Harvest Calculator

Length:  ft.  
Width:  ft.  
Rainfall:  in.

13448 Gallons of Rainwater



Spigot with valve on drip irrigation system.

