GOAL:
Design a model for a rainwater catchment system that can be used on most greenhouses (solar or non-solar).

RESEARCH STEPS:
• Choose catchment design from several models
• Research and address limitations of our design
• Develop and implement a plan for measuring the efficacy of the catchment system

PROBLEM:
• Rainwater runoff in Central Massachusetts is a continuous problem that is polluting nearby bodies of water.
• Agriculture is the largest user of water in the United States, so sustainable agriculture can reduce energy use and water use.

EFFECTS OF THE PROBLEM:
• Erodes freshwater sources and imposes health, financial, and environmental costs on communities.
• Chemicals from non-porous pavements and fertilizers from farming can be carried into freshwater sources and pollute drinking water.

SOLUTION:
• Design a model for a rainwater catchment system that can collect about 20 cubic meters of rainfall per day.
• The system can reduce runoff in large scale use and supply water for agricultural use -> reduces energy use, thereby reduce water use.

ADDRESSING DESIGN CHALLENGES:

REFERENCES:
http://www.google.com/search?q=rainwater+catchment+system&lr=&num=10&safe=strict&tbm=isch&source=sto&sa=X&ei=8ThgU9_4GAaMmALa2YBwBw&ved=0CAkQhw&biw=1024&bih=760
http://www.google.com/search?q=rainwater+catchment+system&lr=&num=10&safe=strict&tbm=isch&source=sto&sa=X&ei=8ThgU9_4GAaMmALa2YBwBw&ved=0CAkQhw&biw=1024&bih=760
http://www.google.com/search?q=rainwater+catchment+system&lr=&num=10&safe=strict&tbm=isch&source=sto&sa=X&ei=8ThgU9_4GAaMmALa2YBwBw&ved=0CAkQhw&biw=1024&bih=760

Example of a Catchment System on a Greenhouse