Background:
The global water availability is on the rise. Over 20% of the world's population does not have access to safe drinking water. More than 2.2 million people die each year from diseases related to contaminated drinking water.

Problem:
The intention of this IPRO team is to develop a product which could become the catalyst for the implementation of rainwater harvesting systems urban and rural residences, on a mass scale in the United States. The team is comprised of various disciplines. Many of which have previous knowledge and research into aspects of rainwater collection or similar areas of study. The team is highly motivated to develop a product that will benefit Pentair Water and its goals, while creating a product that helps improve the quality of life.

Ideas > Product > Marketability

Objective:
Our IPRO objective is to design and market a rainwater collection system that is efficient, user friendly and aesthetically pleasing, to that of the current products on the market.

Installation Instructions:

1. Configure a layout for the boxes
2. Have a plan and a large area on your property that has access to the downspout from your roof.
3. Dig a ditch to put cistern(s) in the ground
4. Take plastic cistern out of box. Attach the pipes.
5. Put connectors onto the pipe that is later going to be connected to the next cistern
6. Lay the next cistern down
7. Twist and tighten the connector so that it connects both pipes connected to the cistern
8. Put down next cistern
9. Put a cap on all other pipes not connected to another cistern
10. Place pump access tube in the lower holder of the cistern
11. Place metal mesh to hold the pavers then a setting bed of gravel
12. Connect the adjustable access cap box to be flush with the pavers you have selected
13. Lay paver system on top of the cisterns
14. Lay ground nearby flush with paver system

SINCE WHEN?
There is evidence that people have been harvesting rainwater since 4000BC. The Roman Empire developed an intricate infrastructure to direct water to be used for irrigation and sanitary purposes. For the most part, modern society has abandoned the practice of harvesting rainwater because water sources have been plentiful and inexpensive.

WHY?
There is a shortage in our water supply fast approaching, and it is up to us to conserve our water supply. There are countless opportunities to use grey water (rain water) instead of potable fresh water like flushing toilets, watering the lawn, washing the car, and many more.

HOW?
Pleasing to harvest rainwater. You can do it underground and have the top exposed, or you can have your cisterns above ground for all to see.

WHO?
ANYBODY can do it! If you have a place to put/bury your cisterns then you can harvest rainwater.
Pentair provides water solutions and technical products to meet the demands of today’s ever-changing global environment.

Distribution of clean, safe drinking water around the world to keeping high-tech electronics and electrical equipment protected from overheating and other environmental factors, Pentair delivers solutions that improve lives daily.

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**Residential Rainwater Harvesting**

**W.O.W.**
Pentair’s “Walking on Water”
Integrated Residential Paving / Collection System

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