One pager for Innovation Challenge, RLDC 3 2020

Water Scarcity is a major challenge for many states of the southwestern United States. It is a specifically delicate issue in the state of New Mexico. New Mexico receives on average less than 10 inches of rain annually. Due to frequent drought and water shortage, water in New Mexico often travels long distances to serve its population of 2,085,538 residents. As only a fraction of New Mexico’s water is supplied by surface sources, such as the Rio Grande and Santa Fe River, much of the state sources its water from underground wells and aquifers.

Poor water quality in New Mexico, mainly as a result of scarcity and overtreatment, may cause a variety of health problems.

Different areas in New Mexico can experience a variety of different water issues. Even in the same city, problems can vary widely.

Smaller and underserved communities tend to be the most affected by these issues. Most of these communities rely on underground water supply but can not afford the appropriate water treatment equipment.

We challenge you to design a system that solves this problem.

Design a system that can be implemented in a community and is able to filter water to standards set by the EPA.

This challenge will consist of two parts:

Part 1:

Two hours of design where a team will come up with a model and specifications for their solution. Each team is to provide a CAD model of their artifact and a design- to- implementation plan for the device or system.

Part 2:

These last two hours will be split into two hours, First hour will be dedicated to creating a pitch to the judges and a marketing plan for the proposed solution. Second hour will be presentations to the judges and a small awards ceremony will take place.