

# Envision | Issue Statement Paper

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## Group Name

House20

## Authors

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## Issue and Topic

Water conservation in San Diego

## Background on the Issue

Water Conservation is a world-wide issue. Many specific areas of the world are in a near constant drought. In the U.S., most of the South West suffers from a long term drought. San Diego is one of the many cities suffering from droughts.

## Problem Statement

Many San Diego residents are struggling to maintain a steady supply of clean, usable water for use in their homes on a day-to-day basis.

## Description of the Problem

San Diego is the driest it's been in 500 years. Californians use 181 gallons of water, per person, per day. The problem is that people haven't been presented with an easier way to conserve water in their busy lives.

## Major Area(s) and Population(s) Affected

A large part of the world is affected directly by water shortages. In third-world countries, people sometimes have to walk three miles for their daily water. In the U.S., people have to pay outrageous sums of money just for clean water. Either way, where there is a shortage of water, the effects will be almost immediately felt by all.

### **Description of Needs to Fulfill**

The public needs to be presented with an easier, stress-free alternative to what they are currently using. House2O would do all the work for you, saving water by circulating it to different utilities after certain stages have passed.

### **Sustainable Solution**

House2O; the water smart conservation house, would allow people to save water with minimal effort.

### **Description of Solution**

Water would be re-circulated through the house system after it runs through a filter system. For example, you would first use the water for the sink, then it would go through a filter system and make its way to the shower, and from the shower to the dishwasher, then from there to the toilet, and finally out to the lawn and/or garden. This is also an automatic or manual system, meaning that this is the standard water cycle, but you can easily change this cycle.

As well, if this project were to supersede the San Diego area and go into different regions, there are different methods of alternative water collecting such as cisterns, personal desalinations systems, tapping rivers or lakes personally, that could make the process less expensive.

### **Key Partners and Resources Needed**

A water conservation company such as Cal-Water, a prominent San Diego Authority Figure, and a housing manufacturing corporation willing to collaborate with the water conservation company would be a good basis for partners.

If the project expands we could collaborate with Southern Nevada Water Authority.

### **Potential Challenges and Workaround**

Cost, time, and the fact that it has to be a newly manufactured home are some of the many small challenges we may face in this project.

### **Timeline**

Three years of collaboration to plan and finalize, and minimal time will be needed for construction.

### **Expected Impact**

A noticeable decline in the use of water and a relief on families that struggle to pay for all their expenses when they don't have to pay for so much water, as well as a significant rise in the standard of living for San Diego.

## **Action Requested**

Funds and the means to contact and collaborate with the needed companies, as well as delegations and ambassadors for the same purpose.

## **Research Sources**

Forbes.com

Cal-water.com

Sandiegogov.com

Snwa.com