

# PUMP IT UP

## SMART RESIDENTIAL WATER MANAGEMENT SYSTEM

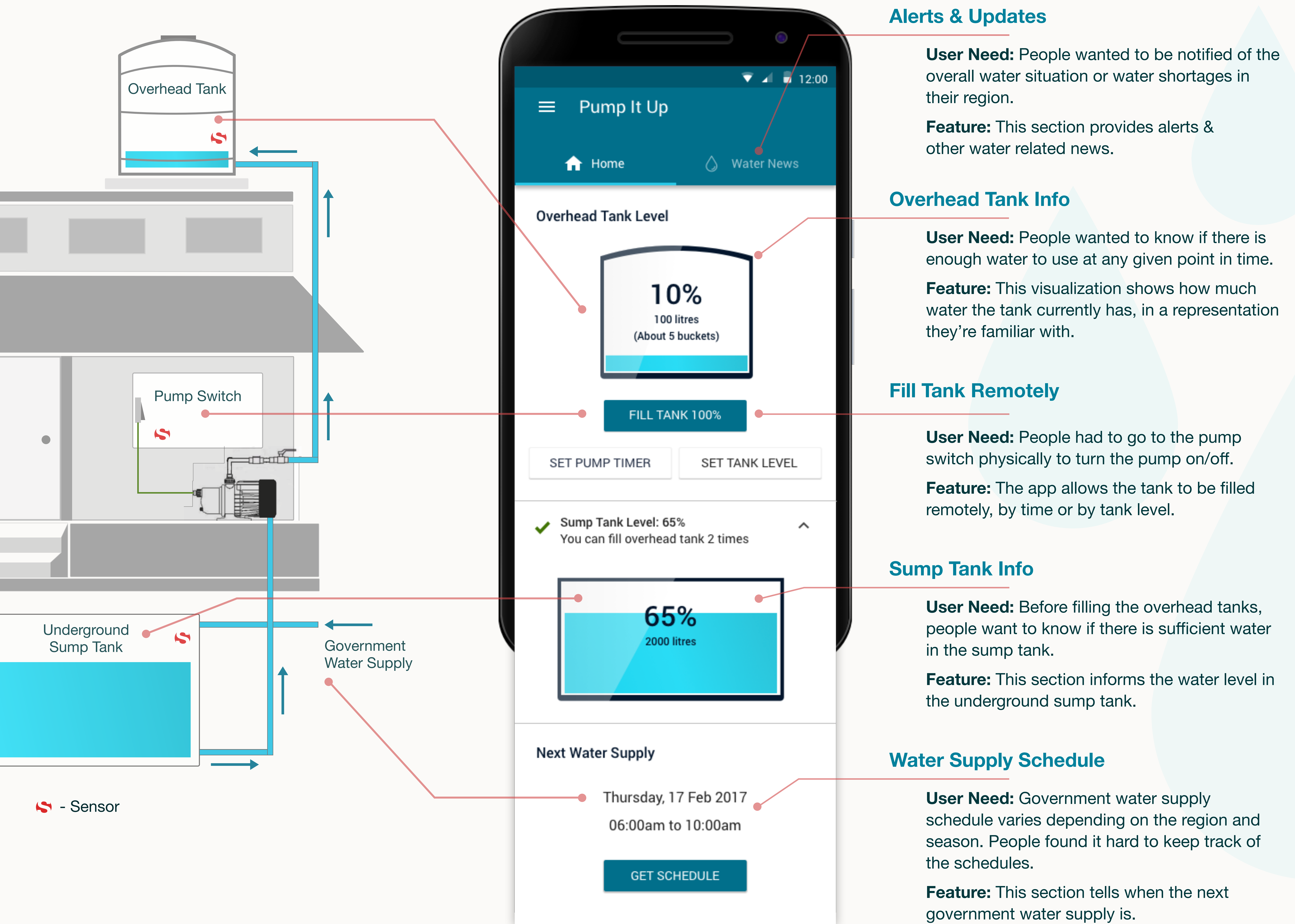
How can we help residents living in stand-alone homes in India manage their water systems more efficiently?

### PROBLEM

Most stand-alone homes in India use a labor-intensive, manual process to manage their daily water needs. This process lacks critical water tank level information, which can result in overflows and lack of water when it's needed.

### SOLUTION

Pump It Up is an Android app that gives users complete control over their water systems using sensors that detect the water level in various water tanks, a Wi-Fi connected pump controller and real-time government water supply information.



### PROCESS



#### RESEARCH

Through our 5 interviews & contextual inquiries, we learned the process & associated problems of managing water in Indian homes.



#### IDEATION

Through journey maps, sketching, and storyboarding, we discovered that an Android app is the most effective solution to the user problems.



#### PROTOTYPING

We designed an Android app that addressed the top user needs of finding tank level information, filling tanks remotely & getting water supply information.



#### TESTING & ITERATION

Informed by our 5 usability studies, we improved the timer & level interaction & added sump tank information in the high-fidelity prototype.