



# Flood Warning System

MS Computation | Spring, 2010 | Parsons, MFA in Design and Technology

## Our Design Problem

Create a low-cost, self-sustaining system to monitor river levels, collect and transmit the measurements, and provide information in a way that can be used for analysis and visualization.

## Our Solution

A modular measuring device that uses GSM net works to transmit water-level and location data via SMS to a central database.

A small physical infrastructure with a large digital infrastructure.

## The Device

The device consists of Sensor and Core:

**Sensor** is comprised of 8 interlocking panels made of cement with a perforated top that contains a barometric pressure gauge; it is buried in the river bank, leaving the pressure gauge exposed to the open air.

**Core** is a solar-powered microcontroller that receives the water-level readings from Sensor and transmits the data via SMS to a database.

