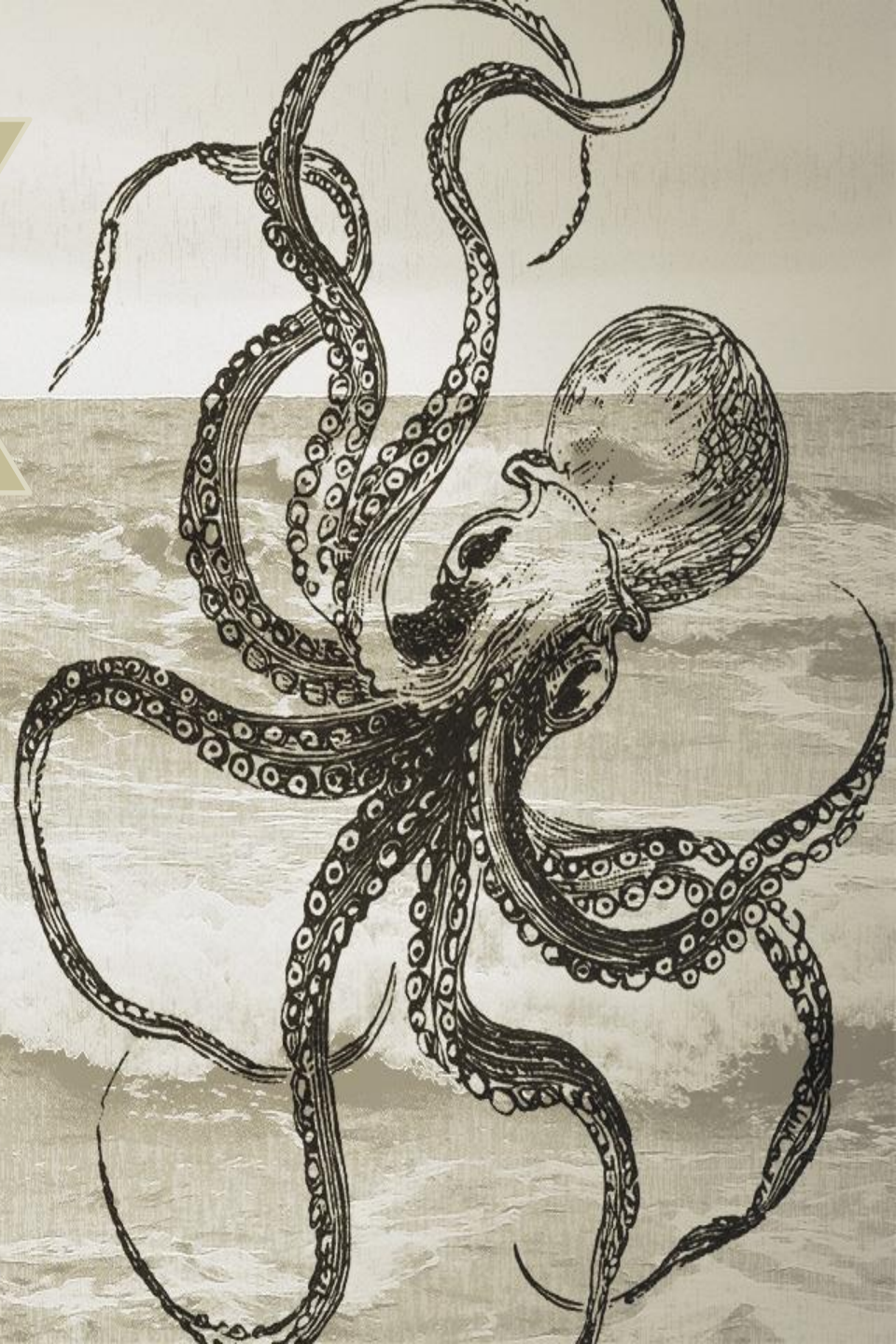


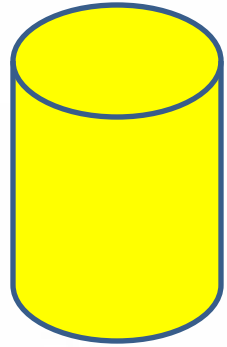
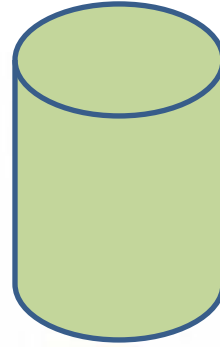
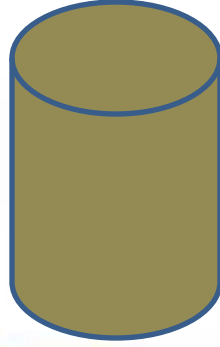
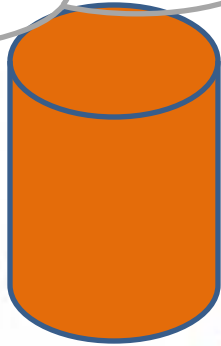
RELEASE THE HYDRA!!

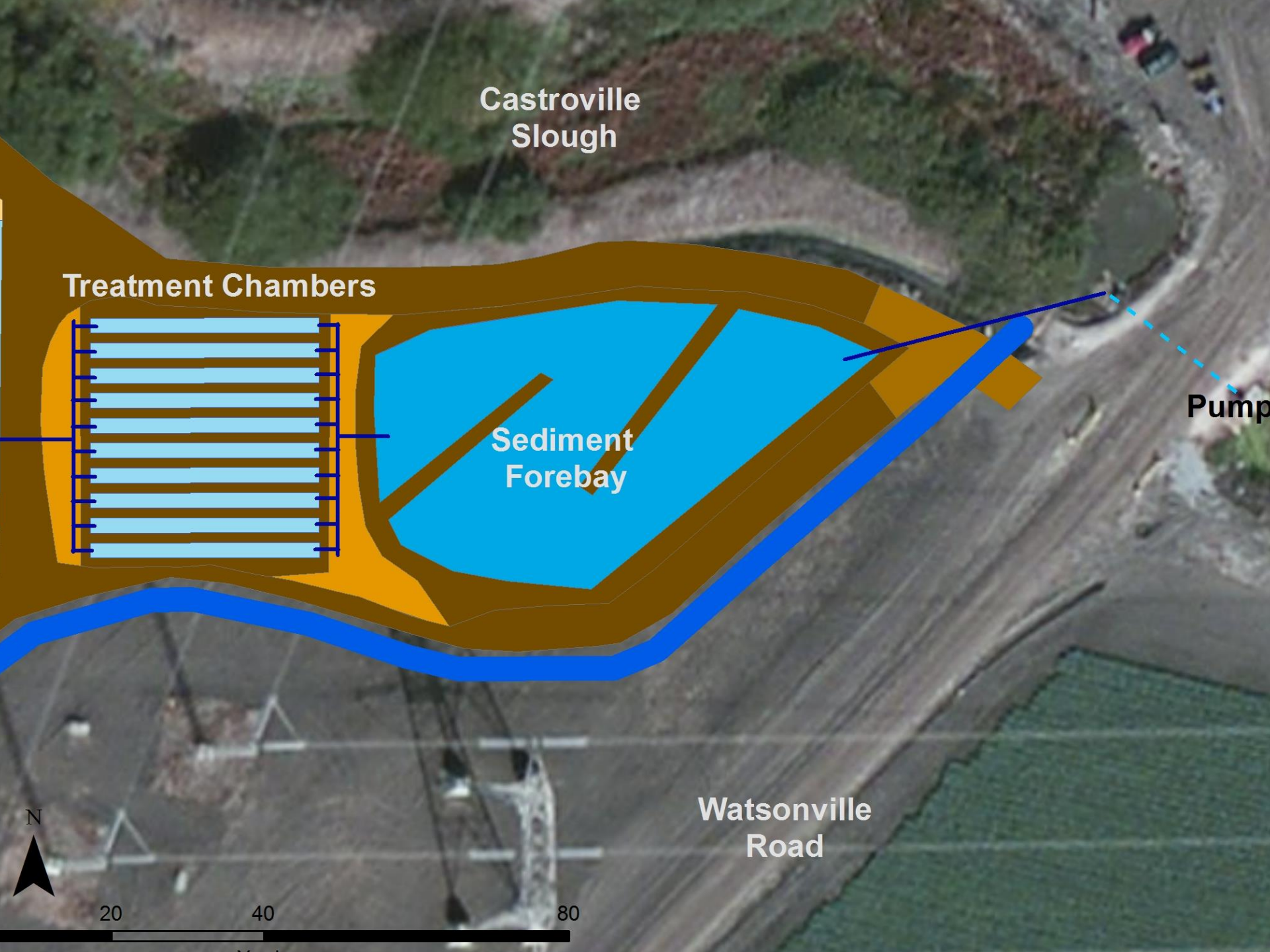


Jason Adelaars
CCWG/MLML
January 24, 2017



**How do I measure water quality
from all these unique points
with only one probe?**





Castroville
Slough

Treatment Chambers

Sediment
Forebay

Pump

Watsonville
Road



20 40 80



Water Quality Sensor

Temperature

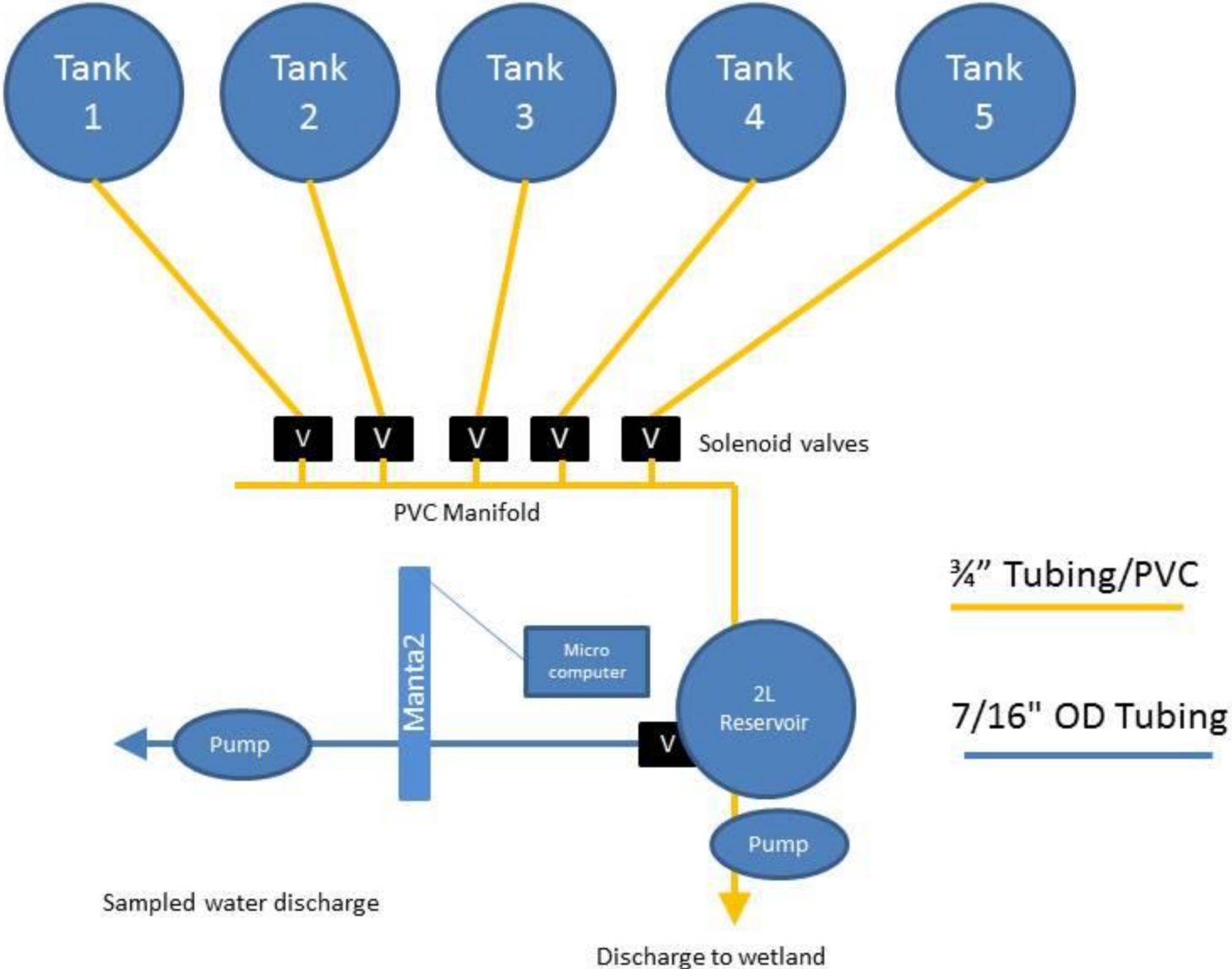
Salinity

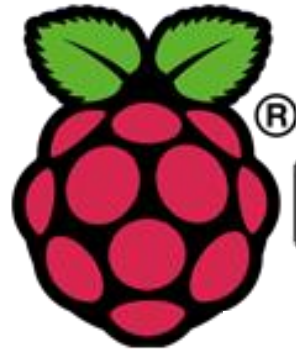
Dissolved Oxygen

pH

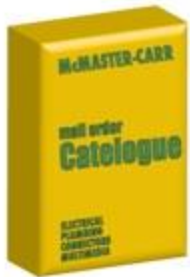
Nitrates

HYDRA Schematic



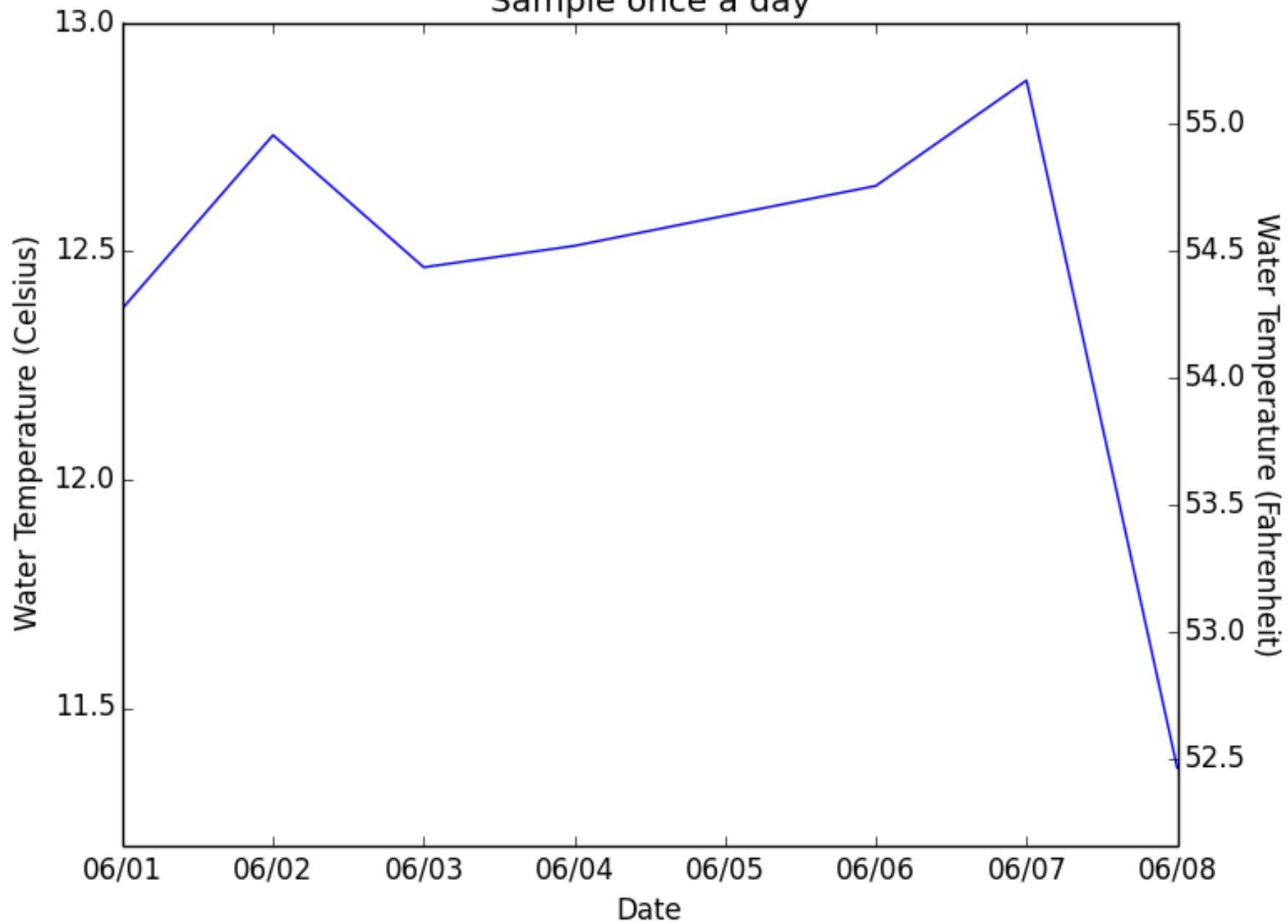


Raspberry Pi

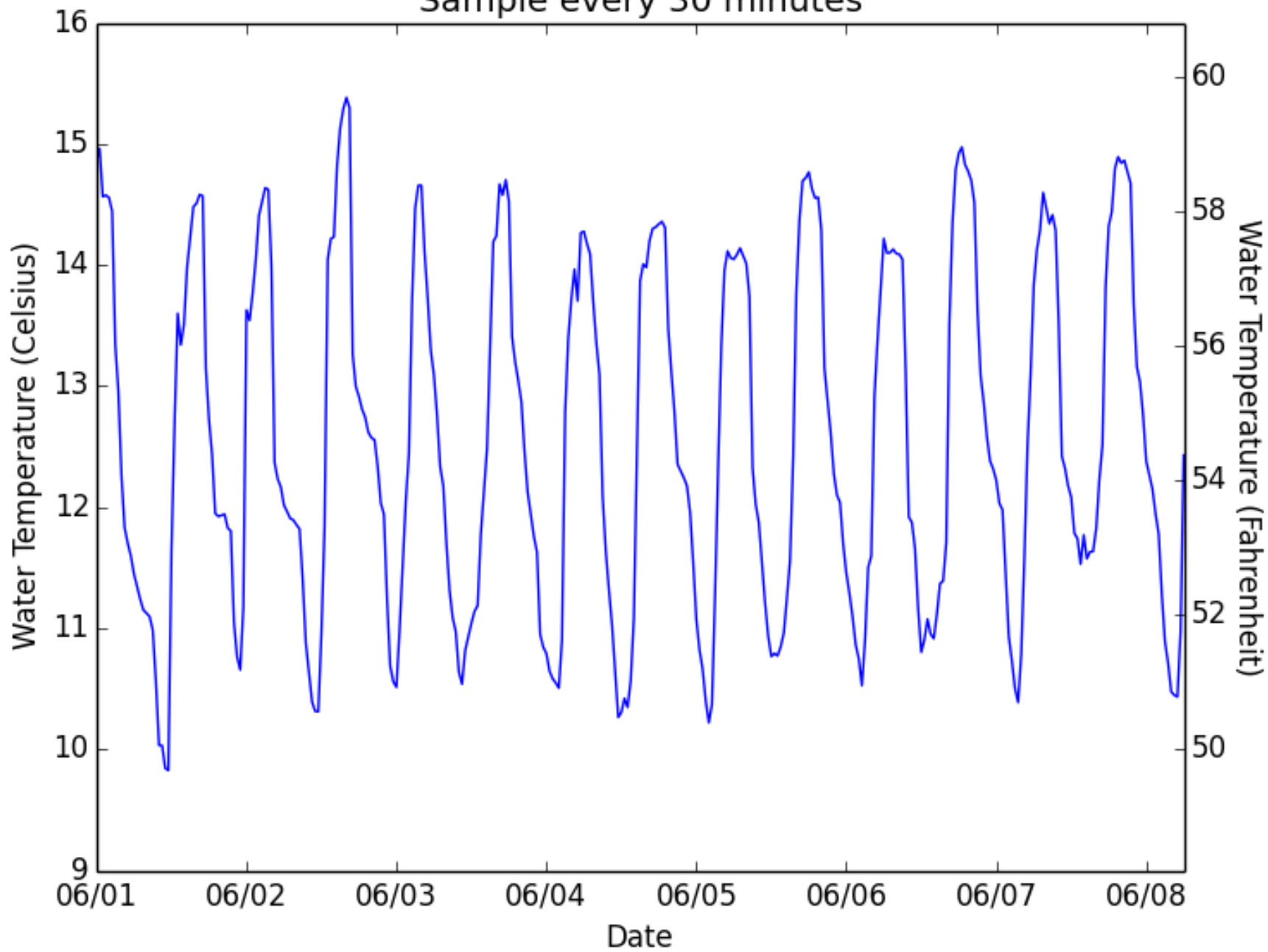


McMASTER-CARR

Sample once a day



Sample every 30 minutes



THE HYDRA!!



Minimizes water sampling costs and effort



Provides high data density



Fun engineering challenge

