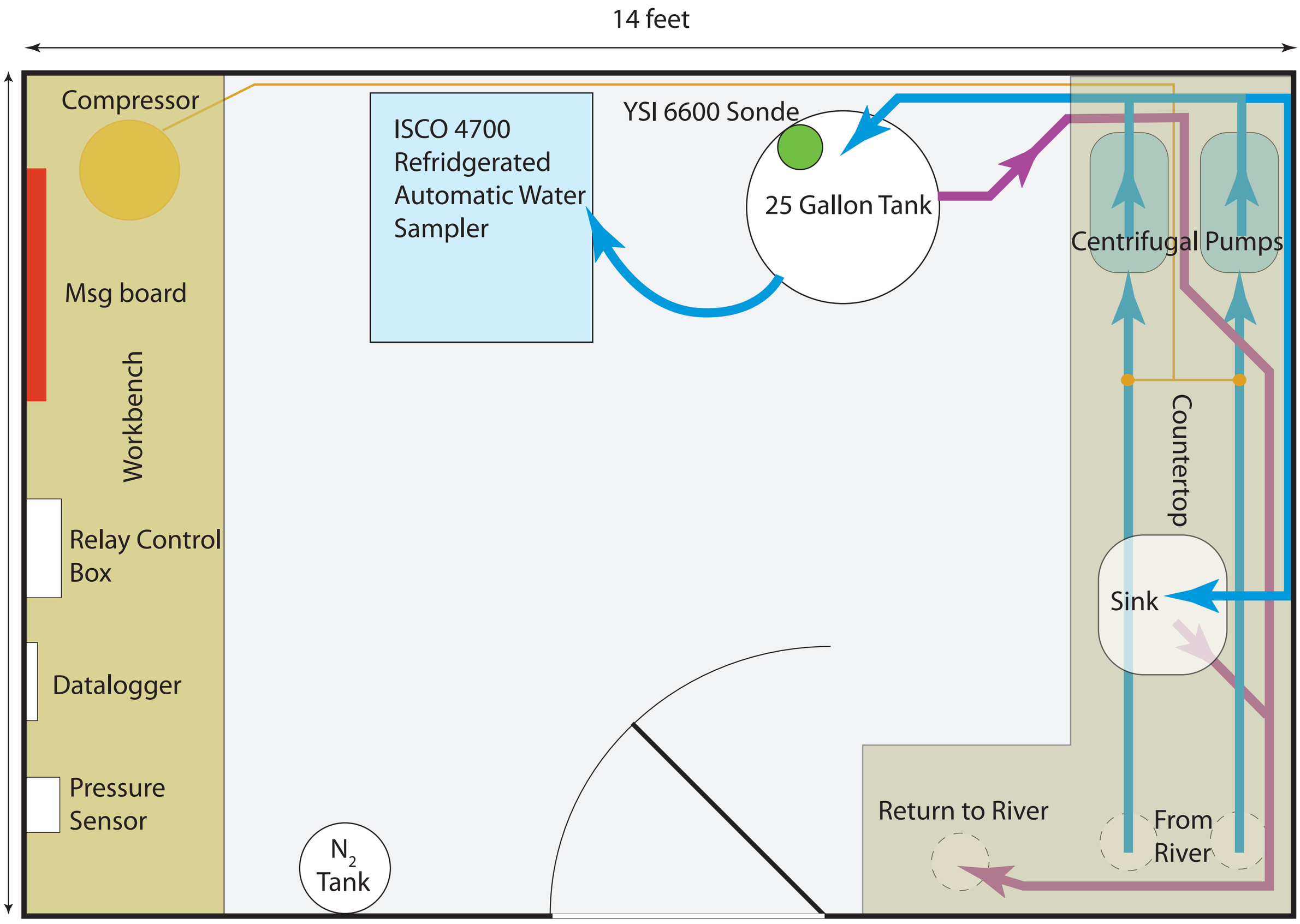
HRECOS: Marist College Pump Station



How It Works

1.) Water is pumped from the river by one of two centrifugal pumps.

2.) Flow from the pumps is split between a sampling sink and a 25 gallon tank.

3.) The tank contains a YSI 6600 sonde which measures water temperature, pH, specific conductance, turbidity, and dissolved oxygen every six minutes.

4.) Water in the tank and sink drains back to the river.

5.) A compressor is used to purge the sample lines of water to reduce biofouling in the lines.

Water level is measured every six minutes using nitrogen from the N_2 tank and a pressure sensor.

Datalogger

- Controls the operation of pumps and valves.
- Initiates sample collection from the ISCO 4700 sampler.
- Records data from the YSI sonde and pressure sensor.
- Sends data to the message board, walkway display and HRECOS.org.