Model Town Preliminary Concepts

Idea: A multifunctional instrument to measure water speed and height; attach water wheel to plastic strip that measures water height and add buoyancy aids so the wheel rises up the strip as the water rises and the speed and height of the water are measured using the same instrument.

Pros:

* More efficient and less expensive due to a reduction in the amount of electronics used
* More easy for visitors to understand

Cons:

* More complex and complicated to build
* Possibly more likely to malfunction

Idea: Install 3-D printed turbines in the river at various intervals connected to generators

Pros:

* Would help replenish some of the electricity lost running the pumps

Cons:

* Likely quite expensive
* Couldn’t replace all the power used by the pump
* Could get tangled with weeds and therefore be quite high maintenance