

## **ABSTRACT**

Water is a source of life that is indispensable for living things, such as for daily needs, means of transportation and as a source of energy such as for hydropower (hydroelectric power). Clean water is a type of water-based resource that has good quality and can be used by humans for consumption or for daily activities such as sanitation. Based on the above problems, this research will make a tool that functions to purify and remove impurities in the water. This tool will work if the sensor in the water reservoir detects turbidity. Sensor data will be processed by the microcontroller and will turn on the existing taps automatically if an unsuitable turbidity is detected. To get the output data according to the results of the data mapping that will be executed by the sensor, this sensor will filter and then distribute water to the filtering area that has been provided using an electric tap.

**Keywords: Water Filter, Arduino Uno, Electric Tap.**