## **ABSTRACT**

Water is the necessity of every living being. Clean water can bring more benefits to those who use it. However, the current condition, the quality of clean water is declining. This has a very significant impact on health, such as decreased quality of food and increased health problems (diarrhea, malnutrition, hepatitis, kidney, nervous, cardiac, etc.)

In this final project is design and implementation of geographic information system for water quality measurement with case study of Bandung city. Of the 8 locations of irrigation points in the city of Bandung will be taken data with water quality gauges. From the point of data collection location, the measuring device will directly enter the data into the database. The data will be processed into information that will be displayed on the website. The information provided is the measurement of pH data and water turbidity, water quality results, and visualization on the water quality condition map.

From the results of testing and analysis that has been done through 8 points river test location in the city of Bandung. The eight rivers do not meet the clean water standards established in the Minister of Health Regulation number 416 / MENKES / PER / IX / 1990. This is evident in the results of data processing shown on the website shown at red dots at all points of the test river.

Key words: Water quality, Measurement, geographic information system, Kota Bandung, website.