

## **ABSTRACT**

Hydrology data is the data that is needed to determine the presence of water on the earth, it have some particular functions in irrigation for some sectors of agriculture, tourism, and workforce. The calculation of hydrologiy data must be appropriate. However, the hydrology data is still processed manually by the hall capacity of Pusair hydrologic calculations because the data using an excel file, it will obstruct the validity of the data calculations. In overcoming these problems, an application making for processing and publishing hydrology data with automatic calculations. The result is output of storage into the database. This application can also move hydrology data that already exists saved in the form of excel file into a database storage with the data import feature. This application is made by the Waterfall method, desktop-based applications and implemented with JAVA programming language and MySQL database as a media of storage data. This application has been tested using BlackBox Testing methodology. Based on these test results, it was concluded that the application can store, process and display hydrology data with database connections that will make publication of hydrology data easier to print reports every year.

Keywords: Hydrology data, application, JAVA, MySQL, waterfall, BlackBox Testing