

## ***ABSTRACT***

*In some areas floods have caused significant losses. Early prevention system against indication of flood is absolutely necessary. Therefore, to treat the problem, this early warning flood system using Wireless Sensor Network (WSN) method.*

*Each node sensor in WSN has a microcontroller, communication technology devices and sensors. Node sensors are allow to collect data from changes in sensors caused by flooding at certain points.. Node sensor sends data to coordinator node. Coordinator node sends back the received data to the gateway node. Data received at the gateway node will be sent short message.*

*In this final project, the best test be held empty land location in sunny day. Maximum distance of data transmission from node sensor – node coordinator is 140 meter with average delay 0,161 second, throughput 10,168 bps and packet loss 0,190%. While data transmission from node coordinator – node gateway, maximum distance obtained 120 meter with average delay 1,716 second, throughput 1,960 bps and packet loss 0,180 %.*

***Keywords:*** *Flood, Wireless Sensor Network, Sensor Node, Delay, Packet loss, Throughput.*