ABSTRACT

Progo Watershed passes through several regions in Central Java and DIY. One of them passes through the Kulon Progo Regency area. The Progo watershed which originates at Mount Merapi which is the main source of sand and stone material and transported to the downstream / estuary towards the South Coast of Yogyakarta. So that the potential of sand and stone is quite abundant along the Progo River flow.

Mr. Tuwuh Rusdi, one of the citizen of Nglatihan I, Ngentakrejo, Lendah, Kulon Progo has the desire and moves to exploit this potential, especially the potential of sand and stone at Progo Watershed. Before mining, Tuwuh Rusdi tried to ascertain the magnitude and existence of this potential. So the company has sent a technical team to carry out exploration activities in the Mining Business Permit Area (WIUP) of 8.94 Ha. Data and information from the field will be analyzed and processed to ensure the technical, economic and environmental feasibility of the planned mining of sand and stone.

After data exploration / processing / analysis activities were carried out, the sand and stone resources in WIUP Tuwuh Rusdi were obtained at $590,845,354 \text{ m}^3$ with an average depth of 5 m from the riverbed. The sediment composition of resources of 19.74% is stone (size +10 cm) and the remaining 80.26% is sand (size -10 cm). So that it can be concluded that the resources in the form of stones amounted to $116,632.8728 \text{ m}^3$ and sand resources amounted to $474,212.4809 \text{ m}^3$.