

Study of recharge area for supporting Geopark conservation on the slopes of Batur Volcano based on geological setting, content of deuterium and oxygen isotopes of groundwater chemistry

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Bali Island where the Batur Volcano is located has high precipitation. Due to the growth of population, a change of public housing has developed toward the slopes of the volcano. However, the Batur Volcano belongs to the International Geopark, therefore it is important to conserve the groundwater for this area. This proposed study is related to determination of the recharge area by combining geological setting, stable isotopes and chemistry content of groundwater, as well as the experiences for other conservation studies on volcanic areas in Indonesia. Until now, previous studies on Batur Volcano have only been based on the conventional approach. Therefore, the accurate determination of recharge area becomes a key factor for the groundwater sustainability to supporting Batur Geopark.

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