

ABSTRAK

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**ANALISIS KEBUTUHAN TERHADAP KETERSEDIAAN AIR BERSIH DI KECAMATAN
PULAU GEBE KABUPATEN HALMAHERA TENGAH**

Kata Kunci : Air Bersih, Analisis Kebutuhan, Metode Least Square,

In this study, the type of data used was derived from primary data, namely with field observations and photos of documentation in the field, and the secondary data needed, namely maps of research areas, Village Science data and BPS data.

Based on the results and discussion of the research methods used, namely the prediction of population growth using arithmetic, geometric and least square methods. In its calculation, the least square method is used, where the selection of this method is based on the magnitude of the value of the correlation coefficient (r) which is close to 1 or $r = 1$ with the smallest standard deviation. From the results of the calculation of the selected method, an analysis of population growth for the next 25 years is then carried out. From the results of the analysis obtained from the calculation of clean water needs in Pulau Gebe District in 2046 which refers to the prediction of population growth of 10878 people with the total water needs until 2046 is 17,496 ltr / s with a production capacity of 19,246 ltr / s while the availability of clean water is 42 ltr / s. It still meets the water needs in The Gebe Island District.