



Caracterización morfobatimétrica y estimación de sedimentos de la bahía interior de Puno, lago Titicaca, mediante tecnología SIG [

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text (article)

Analítica

Lentic ecosystems, suffers morphometric and bathymetric changes in the course of time. This condition at Puno's interior bay, has not yet been detailed, by which this research was orientated to its characterization in the years 2010 and 2012 to compare with 1975, in addition to estimate sediment volume accumulated in the water bed from that date. It digitalized bathymetric charts of 1975 and at present were done new charts by mean ecosound and GIS technology application to compare variations. Sediments accumulates volume was estimated by differences of water volume and in-depth changes between years mentioned. Results refer than bathymetric conditions have changed relatively, keeping an irregular profundity, maximum depths were 7.76 m for 1975, 7.07 m for 2010 and 7.19 by 2012. Largest areas are occupied by lower depths to 1 m and higher volumes in the depths of 3-4 m. Profiles evidence that the bucket has bigger inclination and depth toward Puno's city. 1975 area was 15.79 km² and for 2010 and 2012 was 15.9 km²; 2012 volume was 39 million m³, less than 1975 with more than 42 million. Sediment volume accumulated from 1975 until 2012 was 887352.02 m³, and accumulation rate of 23982.48 m³/year or 4.1 mm/year. Key words: Isobaths, lake morphology, depth profiles, Geographic Information Systems.

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