

# Mechanisms for Lake Formation in the Philippine Archipelago

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## Abstract

Topographic depressions, which when filled with water become lakes, can originate in a number of ways as a result of volcanic processes and activities, crustal and fault movements, stream processes, dissolution of rocks, downslope or mass movements, shoreline processes, glaciation, acolian processes, organic or animal activity and meteorite impacts. Man has also made both intentionally and unintentionally artificial depressions and dams that give rise to man-made lakes. But the mechanisms of formation of most Philippine lakes remain unknown although those of some are well established. Examples are cited in this paper. Lakes with similar mechanisms of formation may possess similar geomorphological, geological, and physico-chemical characteristics.

Directions for Philippine lacustrine research should cover issues on 1) the still unknown origin of most Philippine lakes, 2) assessment of lake-related hazards and risk mitigation in order to reduce disasters, 3) history of climate change as recorded in lacustrine sediments, and 4) policies and strategies for better utilization and development of lake resources which must recognize the truth that lakes are but ephemeral features of the landscape and do not last forever.