

ENVIRONMENTAL QUALITY ASSESSMENT OF A MEDITERRANEAN RIVER SYSTEM

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ABSTRACT

In order to explore the complex interrelations among the factors and processes that determine a rivers' environmental quality, multivariate statistical techniques were applied to a variety of hydrochemical, petrologic, biological, habitat, hydrological and morphologic data from two time periods and 16 sites of the upper-part of the Aliakmon river. It was found that catchment geology governs both, the hydrochemistry and the benthic biota structure. The principal processes that control the aquatic quality are: a) weathering/dissolution of minerals /salts that derive from recent sediment deposits and pollution, b) in-stream biological activity and c) weathering of mafic silicates.