

POINT AND NON-POINT POLLUTION OF THE RAMSAR WETLAND KORONIA IN NORTHERN GREECE

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ABSTRACT

Streams and rivers that discharge into lakes are directly enriched by nutrients and other constituents originating from various activities taking place in their watersheds. The aim of this study was to evaluate the point and non-point pollution of the streams around a Ramsar wetland, lake Koronia. Seven streams receiving water from point and non-point sources discharge their water into lake Koronia. The main activities in the watersheds of the streams that discharge their effluent in the lake are agricultural, industrial and sewage from human communities around the lake. Water samples taken downstream from the point pollution sources, which were near the lake, were analyzed for NO_3^- , NO_2^- , NH_4^+ , P, Cl^- and pH and their concentrations were compared with those in water samples taken up stream. The results showed clearly that the concentrations of all studied water parameters were several orders of magnitude higher downstream than upstream. Sewage therefore, originating from the local industries and human communities, must be urgently and more efficiently treated.

KEY WORDS: Non-point pollution; Industrial wastes; Watershed; Lake Koronia