AIMING FOR CLEAN WATERSAT THE BLACK SEA REGION

[1]VALASIA IAKOVOGLOU, [2]GEORGE N. ZAIMES, [3]GEORGIOS GKIATAS, [4]GEORGE PAGONIS, [5]PASCHALIS KOUTALAKIS, [6]JORDANKASAPIDIS

GERi Lab, Department of Forestry and Natural Environment Science, International Hellenic University, 1st km Drama-Microchoriou, PC 65404, Drama, GREECE.
E-mail: viakovoglou@yahoo.com, zaimesg@for.ihu.gr,ggiatas@emt.ihu.gr,gqpagon1995@hotmail.com, koutalakis_p@yahoo.gr,io_kasapidis@yahoo.gr

Abstract - The Black Sea is considered as one of the most degraded regional seas. Streams and rivers are major sources of sediment and litter. Efforts have been made to improve the conditions of the Black Sea but little focus has been on the inland pollutants and litter, specifically from the rivers and streams that end in the Black Sea. Nature-based solutions (NBS) derive from mimicking nature's ways to substantially manage ecosystems in a cost-efficient way, while providing environmental, economic and social benefits. The presented study is targeting the Black Sea area and is aiming in estimating the effect of land use alteration on the surface erosion basedon erosion pin measurements. The study was conducted for the Aggitis basin and the land uses that werestudied were: rangeland, agricultural land, schlerophylous vegetation and riparian vegetation areas. Based on the data, riparian vegetation areas,that is a good nature's example of "nature-based" solution, indicated the least soil loss. This shows that mimicking nature and implementing "nature-based" solutions at the local and watershed scalefavors reduction of soil pollutants.

Keywords - Stream Bank Erosion, Nature-Based Solutions, Land Use Alterations, Conservation, Biodiversity