Journal of Applied Geochemistry
Vol. 20, No. 4 (2018). pp. 455-461

CONTEMPORARY APPROACH IDENTIFYING DENUNDATION ZONES AND CONTAMINANT STRESSORS AT LAKE BASIN TOWARDS FORMULATION OF RESTORATION STRATEGIES

Shekhar Salunke
Department of Environmental Science, School of Earth Sciences,Solapur University, Solapur. Maharashtra State
E-mail: spr_salunke@bsnl.in

Abstract

Erosion defines the processes of detachment, transportation and deposition of sediments by transporting agents. The soil erosion zones are a source of contaminants that are transported and get accumulated at stream accumulation points, or infiltrate into the subsurface as groundwater. These contaminants accumulate in lakes and disturb the ecological health of the lakes and hence it is essential to focus and determine the risk on priority for designing management strategies for control. A contemporary approach with thematic layer identification of slope, NDVI, LULC, lineament density and RUSLE to compute the spatially distributed erosion and contaminant sources for the Sambhaji Lake Basin area in Solapur district of Maharashtra State has been used in this study. The study ascertains five hazardous erosion zones such as low, moderate, high, very high and severe, through modeling aimed at implementation of soil conservation strategies to prevent soil and water (surface) pollution and control the strategic action plans.

Keywords: Denudation, control strategies, basin management, restoration action.