ASSESSMENT OF DIRECT OR POTENTIAL PERCENTAGE DAMAGES AFTER FLOODS

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Rezumat. Identificarea infrastructurii critice în domeniul apelor și hărțile de risc la inundații pentru managementul bazinelor hidrografice au în componența lor valoarea pagubelor directe și potențiale ce se pot înregistra la producerea unor inundații majore. În prezent această componentă este evaluată prin metode aproximative care prin aplicarea pe suprafețe mari dau rezultate suficient de imprecise pentru a conduce la luarea unor decizii sub sau supraevaluate. La nivel național se impune a fi utilizată o metodă de evaluare individuală a pagubelor procentuale în special datorită eterogenității utilizării suprafețelor de teren. Astfel, evaluarea pagubelor se face pentru fiecare obiectiv social-economic în parte iar rezultatele obținute sunt mult mai precise decât prin metodele actuale.

Abstract. Identification of critical infrastructure in water sector and flood risk maps for watershed management is composed of direct value and potential damage that can occur after major floods. Currently, this component is evaluated through approximate methods which are applied to large areas can generate sufficiently vague results that leads to under or overestimated decisions. At national level it must be used a method of individual assessment of percentage damage mainly due to heterogeneity of land use areas. Thus, damage assessment is made for each of the socio-economic objective and the results are more accurate than current methods.

Keywords: risk maps, potential damage, damage assessment, flood effects

1. Introduction

Floods are natural phenomena caused by excessive rain or melting snow and manifest by sudden discharge overflowing the banks of the watercourse and destruction. The process of flood wave propagation involves turbulence and transport phenomena (depending on water level and velocity can be driven by concrete blocks, rocks, tree trunks, cars, etc.) who have a severe impact on things along the way.

Most often, the impact is a negative one because socio-economic objectives, systematic land, harvests (if flooding occurs during the harvest season), social activities etc. are destroyed. Further development of communities of people and concentration of a number of increasingly large populations in urban areas, especially those located near rivers, are making the need for flood protection to determine the development of novel solutions and implementation of long life structural measures.

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