IMPACT OF THE STRUCTURAL FLOOD PROTECTION MEASURES ON THE ACTIVITIES OF PROTECTION, RESCUE AND RELIEF FORCES

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Abstract: (250 to 500 words: for each heading use the bullet points or narrative - the submission including graphics should not exceed one page)

Problems - Issues / Challenges-Needs
Floods are natural phenomena, which cannot be prevented and are causing many fatalities, enormous economic losses as well as environmental threats. Therefore, it is crucial to set up an efficient flood risk management policy, which would reduce likelihood and the impact of floods. The necessary elements of flood risk management according to “integrative risk management cycle” are preparedness (prevention, preparation), response (intervention, recondition) and recovery (reconstruction). Comprehensive structural flood protection measures can reduce flood risk, but cannot eliminate a potential risk of flooding; therefore, an efficient civil protection service is an indispensable element in a system of flood risk management.

Solutions - Methods / Results - Findings
Protection, rescue and relief forces are involved into a part of the response phase and are responsible for alert, rescue, damage mitigation, information etc. Furthermore, they take care for provisional repair, supply and disposal, communications etc. during the recondition phase. The most powerful force of protection, rescue and relief forces in Slovenia are voluntary fire-fighting units, which are playing also the most important role on interventions during floods.

The implementation of preventive structural flood protection measures influences significantly the extent of intervention and recondition during floods. This can be observed on a case study of the Drava river where a flood event in year 2012 caused enormous damage along the surrounding areas. Especially vulnerable are areas in Dogoše and Duplek, where in year 2015 protection embankment and protective wall were finished. The occurrence of high waters on the Drava river end of October 2018 has shown that the implemented structural measures reduced the flood risk on these locations.

The extent of intervention measures in view of protection, rescue and relief forces was also significantly reduced.

Novelty - Value / Relevance to …
A flood safety in vulnerable areas cannot be achieved with implementation of structural measures only. The potential risk will remain and has to be accepted by society. The cooperation and communication with protection, rescue and relief forces which can give a feedback about the efficiency of flood protection measures is indispensable.

Forum statement
Flood risk can be reduced with structural measures but cannot be eliminated completely, therefore the efficiency of flood risk management is depending on the activities of protection, rescue and relief forces.

Keywords: (up to 5 keywords)
Flood risk management; Integrative risk management cycle; Structural flood protection; Protection, rescue and relief forces

Graphics: (please use the gray area bellow for representative graphics or graphical summary; select the gray area bellow and paste your graphics)