



HIDROMETEOROLOŠKI ASPEKTI POPLAVA U MAJU 2014. NA SLIVU REKE SAVE I U SRBIJI

HYDROMETEOROLOGICAL ASPECTS OF FLOODS IN MAY 2014 IN THE SAVA RIVER BASIN AND IN SERBIA

APSTRAKT

Ekstremne padavine i velika vlažnost tla sredinom maja 2014. godine dovele su do katastrofalnih poplava na slivu reke Save i na drugim slivovima u Srbiji. Poplave su načinile ogromne štete na području tri države, Bosne i Hercegovine, Hrvatske i Srbije, uz značajan broj ljudskih žrtava. U radu se prikazuju hidrometeorološki aspekti ovih poplava i analiziraju njihovi uzroci i posledice. Takođe je prikazani proces izdavanja hidroloških najava i upozorenja zasnovan na meteorološkim i hidrološkim prognozama Republičkog hidrometeorološkog zavoda Srbije.

Ključne reči: ekstremne padavine, katastrofalne poplave na slivovima reka, sistem odbrane i zaštite od poplava

ABSTRACT

Extreme precipitation and high soil moisture content in mid May 2014 brought catastrophic floods in the Sava River basin and in other basins in Serbia. The floods caused enormous damages in the territories of three countries: Bosnia and Herzegovina, Croatia and Serbia, with a significant number of casualties. The paper presents the hydrometeorological aspects of these floods and their causes and consequences. The processes of hydrological forecasting and of issuing flood alerts and warnings that took place in the Republic Hydrometeorological Service of Serbia are also presented.

Keywords: extreme rainfall, catastrophic floods in the river basin, flood defense and protection system

UVOD

Katastrofalne poplave koja su pogodile delove Bosne i Hercegovine, Hrvatske i Srbije sredinom maja 2014. godine su bez presedana u hidrološkim zapisima u regionu. Ovaj događaj je započeo 13. maja 2014. iza-zvan ciklonskim oblačnim sistemom, koji se zadržao nekoliko dana nad jugoistočnom Evropom i doneo obilne padavine u rasponu od 100 do preko 300 mm u najviše pogođenim oblastima za manje od 72 sata. Brz hidrološki odgovor na velikoj zahvaćenoj površini koji je usledio bio je posledica i nesvakidašnje koli-čine prethodnih padavina počevši od sredine aprila koje su dovele do visokog stepena zasićenja tla. Na mnogim hidrološkim stanicama zabeleženi su rekor-dni vodostaji i protoci, kako na manjim bujičnim vo-dotokovima tako i duž velikih reka.

Područja pogođena ovim događajem u Bosni i Her-cegovini i Hrvatskoj pripadaju slivu reke Save, dok je i deo Srbije izvan sliva Save takođe bio pod značajnim uticajem loših vremenskih prilika koje su pratile nagle

INTRODUCTION

The catastrophic floods that hit the parts of Bosnia and Herzegovina, Croatia and Serbia in mid May 2014 were unprecedented in the hydrological record of the region. The flooding event was triggered on 13th May by a cyclonic system that remained over the south-east Europe for several days and brought he-avy precipitation in the range from 100 to 300 mm in the most affected area during less than 72 hours. The quick and wide hydrologic response was also due to unusual amount of antecedent precipitation since mid-April, which caused near-saturation of the soils. Record flood levels were set at many gauging stations, both at small torrential streams and along the major rivers.

The areas in Bosnia and Herzegovina and in Croatia affected by this event mostly belong to the Sava Ri-ver basin. In addition, a part of Serbia outside the Sa-va basin was also under significant influence of the vi-tulent weather and suffered from extensive torrential

1 Univerzitet u Beogradu – Građevinski fakultet, Beograd

2 Republički hidrometeorološki zavod, Beograd

1 University of Belgrade – Faculty of Civil Engineering, Beograd

2 Republic Hydrometeorological Service, Belgrade