

## **Calculation of PMP and PMF for the Sava River**

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**Abstract.** The PMF is by definition the flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in the drainage basin under study. A PMF is generated by the probable maximum precipitation (PMP), which is defined as theoretically, the greatest depth of precipitation for a given duration that is physically possible for a given size storm area at a particular geographic location at a certain time of year. The purpose of the study was to calculate PMF for Sava River that flows near Krško Nuclear Power Plant (NEK). To assure flood safety of NEK it is important to know possible maximum flow of Sava River. We used 24-hours data of PMP that we got from Environmental Agency (ARSO) and divided them to hours data. We calculated eight different scenarios: scenario for spring rainfall, autumn rainfall, maximum rainfall through all year, one scenario was made on basis of equation of PMF (Dingman) dependant only on event duration, two scenarios were made after FEMA guidelines and two after data received on basis of October flood event in Slovenia. The PMP scenarios data were inputted in calibrated HBV model for Sava basin and flow results were calculated.