

Flood Control by Reservoirs in Nea Basin

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ABSTRACT: Norway is a country that generates power mainly from regulated hydropower systems. The Norwegian hydropower system has a large reservoir capacity and a potential for flood control by taking benefit of empty capacity in the periods of high runoff. As such, river basins regulated for hydropower benefit from reduced flood peaks and volumes and reduced societal losses during extreme flood events. Nea river basin is a highly regulated basin that consists of several regulatory reservoirs. The flood control of reservoirs in Nea basin was assessed in this study. The highest flood control is observed in the years of 1988 and 2013 whilst the lowest occurred in 1988 and 2005. The flood control by reservoirs in Nea basin is higher in the Spring season. The different regulations of reservoirs are the reasons to have fluctuations in the flood control by reservoirs throughout the seasons.