

## عنوان مقاله:

Numerical study of flood routing in compound channels

## محل انتشار:

کنفرانس بین المللی هیدرولیک سدها و سازه های رودخانه ای (سال: ۱۳۸۳)

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## خلاصه مقاله:

Recent advances in two-stage compound channel flow aspects improves our knowledge to take into account many complex features involved in this special type of river flow and hence to increase our ability to cope with more efficiently the flood flows. However, among these only a few studies under unsteady flow conditions are available. Due to the difference of the hydraulic and geometric characteristics between the main river channel and its floodplains, flood waves are differently routed in these two parts of the river cross section. Hence, a modified flood routing of the Saint-Venant equations is needed to deliberate this distinctive peculiarity. In this paper, a finite difference method to solve the modified Saint-Venant equations in some homogenous and heterogeneous typical compound channel cross sections are presented. Both explicit and implicit schemes are used in the numerical solution of the basic equations. No difference was observed between the results of these schemes

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/۳۸۶۲>