

## عنوان مقاله:

Seismic analysis of concrete dams including dam and reservoir interaction with using finite Element method

## محل انتشار:

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## خلاصه مقاله:

Concrete dams are considered as the best choices of dam construction in regions where body and base rock have the adequate resistance. In these dams, due to the base narrowing in comparison to earth dams, extra pressure is applied to foundation base and walls. Thus, adequate resistance of foundation and its reformation is required. Dynamic response caused by dam on the basis of different vibrating modes collection is investigated. In this paper dynamic analysis of concrete dam is presented with regard to foundation effects and considering the dam interaction effect with bed lake and lake. All analyses were done by means of ANSYS software and as a case study Pine flat dam is chosen. Complete dynamic interaction of Dam and reservoir with incompressible fluid, absorbing borders of energy in foundation and Supports and far borders are considered in analysis. In addition, foundation is assumed to be rigid and flexible in which various proportions are regarded for elasticity module in analysis. Results of analyses showed an .interaction of Dam and reservoir due to decrease frequency

## کلمات کلیدی:

Seismic Behavior, Numerical model, Concrete Dam, Seismic Effect, Finite Element Method

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/527856>

