

## عنوان مقاله:

NUMERICAL SIMULATION OF SEA LEVEL RISE EFFECT ON SEAWATER INTRUSION INTO STRATIFIED

COASTAL AQUIFER

## محل انتشار:

دوازدهمین همایش بین المللی سواحل، بنادر و سازه های دریایی (سال: 1395)

تعداد صفحات اصل مقاله: 2

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## خلاصه مقاله:

Population growth and scarcity of coastal freshwater resources have increased the stresses on many coastal aquifers, leading to aquifer storage decline and seawater intrusion (SWI). The investigation of coastal aquifers routinely involves the application of SWI models, which can be divided into two categories, namely sharp-interface and dispersive-interface approaches. Sharp-interface approaches are computationally more efficient while dispersive-modeling approaches are more numerically challenging, but allow for freshwater-saltwater mixing. Literature study demonstrated that concerning on sea level rise (SLR) has been grown up for the last decade and numerous studies have addressed the extents, rates and timescales associated with SWI induced by SLR for mostly homogeneous cases. Despite considerable attentions to SLR problem, there is still a gap for aquifers with spatial variability of properties that make aquifer more complex but are naturally widespread [1]. In stratified aquifers, vertical leakage through layers makes the intrusion mechanism different compared to homogeneous aquifer. In this study, a sharp-interface approach (named as SHI-SWIM) is developed and the result is compared with dispersive SEAWAT model for gradually (GSLR) and instantaneously SLR (ISLR) problem

كلمات كليدى:

لینک ثابت مقاله در پایگاه سیویلیکا:

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