

عنوان مقاله:

Water Quality Management by Means of Assimilative Capacity Considering Allowable Concentration and Affected Distance

محل انتشار:

چهاردهمین کنفرانس ملی هیدرولیک ایران (سال: 1394)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Seyed Arman Hashemi Monfared - Assistant Professor, Dept. of Civil Engineering, Faculty of Shahid Nikbakht Engineering, Univ. Of Sistan and Baluchestan, Zahedan, Iran

Mohsen Dehghani Darmian - M.Sc. Student, Dept. of Civil Engineering, Faculty of Shahid Nikbakht Engineering, Univ. of Sistan and Baluchestan, Zahedan, Iran

Bahareh Pirzadeh - Assistant Professor, Dept. of Civil Engineering, Faculty of Shahid Nikbakht Engineering, Univ. Of Sistan and Baluchestan, Zahedan, Iran

Mehdi Azhdary Moghaddam - Associate Professor, Dept. of Civil Engineering, Faculty of Engineering, University of Sistan and Baluchestan, Zahedan, Iran

خلاصه مقاله:

Industrial and urban development, Population growth and settlement are common cause of increased pollution. Pollutants are in many instances discharged untreated to rivers due to lack of adequate treatment facilities and high treatment cost. This paper considers assimilative capacity as an important water quality index when the river point source pollution is controllable. The simulation of pollution transport in the river and calculation of assimilation capacity is based on the mathematical equations of pollution propagation with no turbulent flow. The proposed procedure for water quality protection is applied in a hypothetical case study and the obtained results are expressed. The results demonstrate that the river flow variation can modify the assimilation capacity up to 97%.

کلمات کلیدی:

Assimilative Capacity, River pollution, Simulation, Water Quality, Affected distance

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/437936>

