عنوان مقاله:

Assessment of weirs in dissolve oxygen (DO) level in Kor River

محل انتشار:

پنجمین کنگره ملی مهندسی عمران (سال: 1389)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

Kor River is one of the main rivers in Fars province, Iran. Because the Kor River is polluted as a result of urbanization and industrialization, the biochemical oxygen demand (BOD) concentration was increased. Consequently, dissolve oxygen (DO) was decreased. It is necessary to use versatile water quality models to asses the DO concentration and make policies for pollution control. Several weirs are located along the Kor River to distribute agricultural water to adjecent farms. These weirs enhance reaeration so that DO levels increase along the river. According to the DO profile, there occurs a large decay of DO in the lower half of downstream of Kor river, between 75 and 13 km, caused by the increased discharge of municipal and industrial pollutants.To determine how much weirs affect DO levels, another model without weirs was constructed. It shows an increase of DO deficient regions, located between 79 and 2 km. To improve present situation, three extra weirs added to the existing model. It shows that level of DO, to some extend increased but, would not achieve to standard level, 4 mg/l.

کلمات کلیدی:

Kor River, QUAL2K, dissolve oxygen (DO), weirs