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Lake water quality of Kazan city (Russia) Kaban lake in the anthropogenic pollution conditions and improving actions implementation

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Abstract

© Research India Publications. Researches of lake water quality for the Kaban system in Kazan are conducted. Lakes Lower and Mid Kaban in the past were suitable for city water supply, but because of the trade and household sewage intake, by 1970th it became strongly polluted. For the purpose of water quality improvement the project of improvement, according to which the majority of the sewage production earlier dumped to lakes was taken away on treatment facilities, was developed and realized, cleaning was carried out for bottom of lakes L. Kaban and M. Kaban from the polluted ground deposits, the collecting pipe for collecting the emergency sewer waters is constructed, coasts are well arranged. Improvement of water quality turned out to be consequence of the held events. However, the anthropogenic impact remains rather high. The researches of water we conducted in Kaban Lake showed its low quality. In this regard, for each of the studied lakes the main sources of pollution were revealed. On the basis of impact level assessment on lakes and their current state, the set of measures for improvement of water quality is offered.

Keywords

Environment, Lakes, Management, Monitoring, Pollution, Restitution, Water use