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Assessment of impactson geosystems in oil production region

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. This article presents a sample assessment of contribution of several impact sources to the groundwater condition in the intensive oil production region (PJSC Tatneft) (Tatarstan, Russia). The method proposed is designed to minimize the subjectivity of the assessment and permits to derive the map of a man made impact on the groundwater. The use of river basins is argued as a main spatial unit for characterization of the anthropogenic impact and the environment state due to its scalability properties. Proposed combination of GIS technologies, spatial analysis and statistical approach makes it possible not only to quantify the human impact on the environment, but also to determine the contribution of individual industries as well as to evaluate the quality of the assessment.

Keywords

Anthropogenic impact, Basin approach, Environment, Geographic information systems, Integrated assessment, Nature management, Spatial analysis