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Criteria of rehabilitation of biotic communities in oil-polluted small rivers (by example of the Shava River, Nizhnii Novgorod oblast)

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Abstract

© 2014, Pleiades Publishing, Ltd. An assessment of the ecological state of the small Shava River (Kstovskii raion, Nizhnii Novgorod oblast) subjected to oil pollution as a result of a pipeline accident in 2007 is presented. On the basis of physical and chemical characteristics of water quality and the results of a study of hydrobiont communities, the degree of the river pollution has been determined and a conclusion about the rehabilitation of communities as a result of the complex effect of recultivation measures and self-purification processes has been made. Criteria for recultivation activity completion have been defined according to hydrobiological indicators (phytoplankton, zooplankton, and zoobenthos).

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Keywords

criteria of rehabilitation, oil pollution, phytoplankton, rehabilitation of communities, small river, zoobenthos, zooplankton