

ABOUT POSSIBILITY OF FRESH GROUND WATER QUALITY SELF RECOVERY IN TIME OF TECHNOGENOUS IMPACT REDUCTION

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Ground waters on the territory of modern valley of Zerafshan river have practical interest as source of potable water for many areas and industrial enterprises. These waters were used last 20 years mainly for irrigation purposes. From 1978 up to 1992 withdrawal of underground water permanently increased due to area increase of irrigated land. During 1988-1992 years annual average extraction is raised close to the value of regional exploitation stock, that is close to limiting. In vegetation period extraction exceeded limiting level nearly 50%. As a result of intensive withdrawal the deterioration of ground water quality was happened. The increase of water mineralization, infringement of relation between mineralization and relative content of hydrocarbonates, sulfates and sodium is observed. Gradient of changes is increased in direction from ground water feeding zone to the zone of unloading. After 1992 irrigation is carried out in expense of surface water. The value of total extraction of ground water is reached nearly the level of 1979. During this time in the zone of feeding of ground waters is marked decrease of mineralization and recovery of disturbed relation between mineralization and relative content and mentioned above ions. In the zones of transit and unloading of ground water is observed only decrease of its mineralization. It is revealed that intensive extraction of underground water have influence to regularities of formation of chemical content increasing as far as movement of ground water flow from feeding zone to the unloading one. Used particular approach may be implemented for the development of method of limiting impact establishing.