



TRANSBOUNDARY FLOODS IN THE TERRITORIES OF FERGANA VALLEY OF UZBEKISTAN

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For the last 15 years flooding occurred in a number of cities and villages, on Uzbekistan and Kyrgyzstan transboundary territories of Fergana valley (figure 1.) As a result, basements of dwellings periodically have been flooded with groundwater and irrigated lands are being salinated. Ground waters of Uzbekistan are salinated by infiltrational flow from the territories of Kyrgyzstan. Rishtan wellfields are being distributed salty water. The salination of irrigation zones is a result of dissolution of gypsum in aeration zone of Burgundin region, transfer of it with groundwater flow and evaporation of the groundwater from irrigation zones. Thus, the soil productivity in this region has been reduced and farmers are not able to gather enough crop. All the water formed, as a result of infiltration of surface water in upper parts of the talus train (in gravel zone) collects at definite place and exits to the surface on lower parts of the flow out (in clay zones). Up to recent years, natural drain provided stable conditions and did not allow the development of flooding. But, nowadays, Kyrgyzstan began the irrigation of upper parts of the flow out. This resulted in increase of water amount at lower parts of the flow out. And at lower parts of the flow out, farmers from Uzbekistan flattened the territory and liquidated the natural drain. Thus, all the water collected here and over flooded the territory. The basements of all dwellings are totally flooded. Field study is consisted of the observation of flooded sites, regime wells and measurement of river charge.