

## **The Environmental Aspects of Hydrogeology in Arid Zones**

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The following hydrogeological features affect the environmental situation in arid zones:

- predominant accumulation processes of salts and their redistribution in a «mountains-plains» system through an eolian migration;
- high vulnerability of ground water to contamination;
- ground-water recharge mainly by surface water;
- existence of two sub-types of ground-water formation in the zone of free water-exchange – autochthonic and allochthonic. The autochthonic formation occurs at the expense of water resources of arid zones, the allochthonic one – through seepage of river water from humid mountainous areas. Natural ground-water resources are localized chiefly on territories with allochthonic sub-type of formation;
- wide development of phyto-hydrogeological ecosystems, the structure, state and functioning of which are determined by hydrogeological factors.