

Assessment of water resources of Borjomi municipality

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This work is dedicated to the study and evaluation of the state of the surface and underground water resources of Borjomi municipality with a holistic and multidisciplinary approach, because of the conducted work, the existing hydrological resources in Borjomi municipality and their integrated management perspectives are described.

The establishment of innovative management as a standard in the integrated management of water resources of the region is naturally combined with the character of local water resources, environment, climatic conditions, terrain, and local and international level requirements of water resources.

The obtained conclusions showed that although abstraction in Borjomi municipality has a local impact on underground and surface water resources, it does not have a negative impact on the hydro ecology of both underground and surface water resources.

As a result of the research, all possible scenarios were discussed and the optimal solution was chosen, which will contribute to the optimal use of existing water resources and future development planning.

The model developed by analyzing complex data improves the hydrogeological understanding of the regional flow of groundwater and surface water, providing the most up-to-date representation of the water balance in the region. It will be used to inform regulatory decisions and assess the impact of abstraction on water bodies, which will help protect the environment.

Literature

- [1] Hydrogeological report - on recalculation of operational reserves of Borjomi mineral water deposit. (as of 01.05.2021) - "IDS Borjomi Georgia", JSC "Hydec".
- [2] Water Resource Assessment Handbook to Review National Capabilities – UNESCO -1997

