

## Problems of reservoirs and their implementation measures on the example of Tbilisi Sea

*Elene Ghvinianidze*

E-mail: [elene.ghvinianidze130@ens.tsu.edu.ge](mailto:elene.ghvinianidze130@ens.tsu.edu.ge)

Department of Geography, Faculty of Exact and Natural Sciences

Ivane Javakishvili Tbilisi State University

3, I. Chavchavadze Ave., Tbilisi, 0179, Georgia

Providing the population with safe drinking, irrigation and recreational water is one of the most difficult problems of water supply management. To date, the problem has long gone beyond the private interests of any single agency of the country, as it significantly includes both meeting the daily needs of the population and protecting their health, as well as the country's security and its sustainable economic development. In Georgia, the problem became important after the incidence of various dangerous diseases for human health increased in the last decade, the quantitative indicators of infectious diseases of unknown origin increased, the mortality of newborns and young children, and the average life expectancy decreased. Based on the results of complex research, by developing special methods, recommendations and implementing them in Tbilisi's water supply system, biological, chemical, physical, mechanical or complex barriers and methods of treating water bodies will be created. The latter will significantly reduce the "load" of water reservoirs with various types of pollutants. Accordingly, the number of diseases caused by substances dangerous to human health and also the level of use of disinfection reagent - chlorine.