

ECOLOGICAL PROBLEMS OF WATER RESOURCES IN UKRAINE

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Ukraine faces a shortage of fresh water. A few years ago, it was incredible, but today, we are approaching such a sad reality. By 2050, Ukraine will need to import clean water, according to projections by the Institute for Water Issues and Land Reclamation. According to official data, there is already a natural shortage of fresh water of sufficient quality in 13 regions of Ukraine. The problem is most serious in the southern region - Dnepropetrovsk, Zaporizhia, Nikolaev and Odessa, said the head of the public organization "All-Ukrainian Ecological Union" (Goncharenko, 2021)

One of the causes of the degradation of aquatic ecosystems is the extensive violation of environmental laws. In 2020, the National Environment Inspection counted 189 million UAHs. Destruction of the environment, in over a hundred cases we handed the material over to law enforcement because of a criminal act. At the same time, the main threat to the quantity and quality of drinking water in Ukraine is climate change, which has led to a reduction in Ukrainian river run off and infiltration recharge of groundwater. (Malevany, 2021)

We think, the biggest difficulty with water bodies is the discharge of harmful substances, untreated sewage, and pollution of rivers and lakes. In other words, the water is poisoned, and people use it for the needs of the water supply.

That is, they use it to drink water and irrigate fields, contaminating people and soil with dangerous compounds. It is not just industry that has a negative impact on the state of water. There is no less pressure on the ecosystem from utilities (Kyivvodokanal, Dniprovodokanal, Lvivvodokanal, Nikolaevvodokanal and many others). They regularly discharge sewage into rivers, lakes and oceans. The Dnieper, Karmius, Mius, Transnistria, Black and Azov Seas receive the most of them.

We also see that aquatic ecosystems are also heavily influenced by war.

According to WWF Ukraine, before the war, much of eastern Ukraine was not supplied with water independently, relying mainly on water from the Dnieper River, a system of reservoirs and canals known as the Dnieper-Donbass. During the Donbas War, the Dnepr-Donbass Canal and local water and drainage systems were bombarded, resulting in severe water loss, pollution and deterioration of water quality. The situation escalated as the full-scale invasion began. In the Oskol reservoir in the Kharkiv region alone, 355.5 million cubic meters of water were released due to the destruction of the hydroelectric complex. The water first entered the Oskol River and then the Seversky Donetsk River. The Oskol reservoir supplies water to the vast majority of the population of the Luhansk and Donetsk regions. The channel's final destination city is Mariupol - where the situation is now critical. Especially due to insufficient water supply, there is a threat of the development of infectious diseases. The territory of the Luhansk region temporarily controlled by Ukraine is still without water, and the water supply systems of cities such as Sumy, Nikolayev, Chernihiv and Kharkiv are also affected (Gorchinskaya, 2022).

It's time to address the issue of water conservation comprehensively and consistently. Modernization of water and sewage treatment and treatment facilities, bringing local officials to justice for failing to perform their duties, and implementing plans to clean up and deepen the river bottom.

In addition, the solution to the problem can be: the preservation of drinking water reserves, the desalination of salt water, the drip irrigation of crops, that is, the water enters the roots of the plants, thereby reducing the consumption of fresh water, water treatment technology. The water contains herbicides, fertilizers and other harmful substances that can be removed by liquid chlorine.

In conclusion, we should conserve water, because first of all everything depends on us. By following the rules of the State Ecological Inspectorate, we can avoid the shortage of water. Don't throw garbage into rivers and lakes, try to improve the quality of water and use it rationally.

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