

ECOLOGICAL PROBLEMS OF WATER RESOURCES IN UKRAINE

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Environmental problems of Ukraine's water resources begin much earlier than June 6, 2023. The territory of our country is covered by an extensive network of rivers, over the past 10 years the quality of water in which has not decreased enough, and in some cases, there are talks about the general impossibility of using the banks of small and large rivers, not only as sources of fresh water, but also for recreation and recreation.

For example, precisely for this reason, after the Russian army blew up the „Dnipro – Mykolaiv” water pipeline, which at that time passed through the temporarily occupied Kherson region, from April 2022 until today, the city with a population of approximately 500,000 was forced to take water from the Buzki Liman and the Southern Bug River.

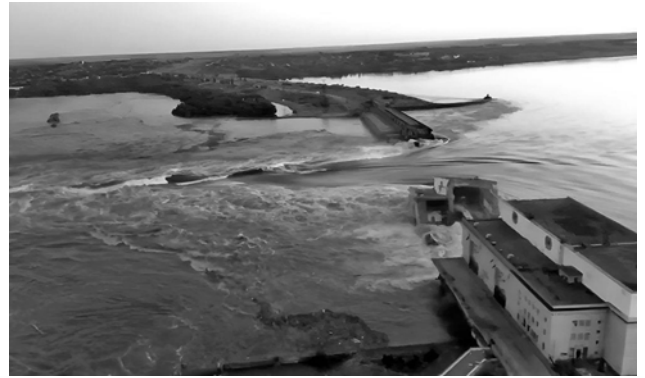


The results of the destruction of the water pipeline “Dnipro – Mykolaiv”

According to the research of the „Black Sea National University named after Petro Mohyla”, it was determined that the category of water quality by the components of the salt composition in the pre-war period is 6.1, which is less than in 2022 (6.5); according to tropho-saprobiological indicators (environmental and sanitary) - the pre-war period is 4.3, which is less compared to 2022 (5.0); according to specific indicators - in prewar times it is less and is 4.7 compared to 2022, when this index was 5.0. All defined surface water quality classes correspond to the degree of pollution "dirty" or "very dirty" and the state "poor" or "very poor". During the studied period, there is a steady trend towards a gradual increase in hardness, dry residue, sulfates, and chlorides in surface waters. (Assessment of the state of surface

waters within the city of Mykolaiv under wartime conditions 2023. p.80)

The explosion of the Kakhovka Dam on June 6, 2023 worsened the ecological condition not only of the rivers, but also of the entire region. This is what the journalists of The New York Times write about it: “Thousands of people were displaced by flooding from one of the world's largest reservoirs, which was vital for irrigating farmland considered the breadbasket of Europe. The disaster puts global food supplies for millions at risk and could threaten fragile ecosystems for decades.” And that’s not all, the bloom of water, a mass plague of fish, pollution of the bottom of reservoirs.



The Kakhovka Dam was destroyed by the Russian army June 6, 2023.

The ecological problems of Ukraine's water resources need to be solved in the post-war period no less than the issue of the reconstruction of our country, because the contamination of drinking water sources can create a danger to the health of the population in these regions and the threat of the extinction of ecosystems.

References:

1. Mitryasova, O. (2023). Assessment of the state of surface waters within the city of Mykolaiv under wartime conditions, 80-81.
2. Glanz, J., Santora, M., Robles, P., Willis, H., Leatherby, L., Koettl, C., Khavin, D. (2023). Why the Evidence Suggests Russia Blew Up the Kakhovka Dam. The New York Times. Retrieved from <https://www.nytimes.com/interactive/2023/06/16/world/europe/ukraine-kakhovka-dam-collapse.html>